

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicants: Oliver, et al.

Serial No.: 09/036,236

Filed: March 6, 1998

For: SYSTEM FOR MANAGEMENT OF TRANSACTIONS ON
NETWORKS

Examiner: Jeffrey A. Smith

Art Unit: 3625

March 26, 2007

Hon. Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

APPEAL BRIEF

In response to the Final Office Action dated August 25, 2006, the time for response to which expired November 25, 2006, having been appealed by Notice of Appeal dated January 25, 2007, having been extended by Petition for Extension of Time, applicants herewith submit their Appeal Brief pursuant to 37 C.F.R. 41.37.

(i) Real party in interest.

The real party interest is the Assignee, Clickshare Service Corporation, Williamstown, MA 01267, assignee of the invention, assignment recorded August 13, 1998 at Reel 009394, frame 0861; Reel 009387, frame 0939; and Reel 009387, frame 0974, from the inventors, with a mesne assignment of 1/3 to Newshare Corporation.

(ii) Related appeals and interferences.

There are no related appeals or interferences, which are related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(iii) Status of claims.

Claims 1-88 are in the application.

Claims 1-88 are rejected.

The rejection of claims 1-88 is appealed.

(iv) Status of amendments.

No amendments filed subsequent to final rejection were proposed.

(v) Summary of claimed subject matter.

References are to paragraph numbers of US 2002/0133412A1 (09/036,236)

1. A system for managing client accounts and controlling access to resources over data networks, said system comprising:	[0006] A further object of the present invention is to provide a system for managing client accounts and controlling access to resources over data networks.
(a) a mechanism for sharing client information and charges among a plurality of service providers;	[0007] It is another object of the invention to provide a system which provides a mechanism for sharing client information and charges among a plurality of service providers and publishers.
(b) a client registration database maintained by one of the service providers (its "home provider") and includes information which selectively authorizes access to the resources of the other service providers ("outside providers"), each service provider maintaining an independent database of its respective clients;	<p>[0155] This service allows Service Providers to register users for the purposes of access control, service customization and billing. All user demographic and financial information (in addition to preference and service classing information) is stored in these databases at each Service Provider site. Users are authenticated locally from information stored in these databases, after which a subset of the stored information is provided to the Clickshare Authentication Service so that it can help all Service Providers recognize valid Clickshare users.</p> <p>[0273] On the server (logging facility) side, a master logging process spawns a slave process for each connected client. Each of these slave processes opens a connection to the Facility's log database manager. This database manager can reside on the log server machine or on another machine (accessed through a network socket). The Facility's databases are organized such that as transaction records are returned they are "filtered" by "owning publisher". Thus all records for one user reside in one database--that of his "home" publisher. These log databases are updated in real-time. The Facility's database manager can "dump" these databases into the offline settlement service at any appropriate frequency (daily, weekly, monthly) depending on load.</p> <p>[0367] Once the HTTP server has obtained the user's Authentication information and has validated it locally, the HTTP server contacts TVS with a request for a new Authentication Token. In making this request, the HTTP server sends the user's profile to TVS with a request for a new Authentication Token. This profile information</p>

	(along with other per-user information) is stored in each publisher's registration database.
(c) a settling means, separate from a respective home provider, for settling accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers, the settling means accessing a respective home provider registration database, and communicating with an accounting database maintained separately from a respective registration database;	<p>[0009] It is a further object of the invention to provide a system which includes a settling means adapted to allow the system to settle accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers.</p> <p>[0017] 1.1. A system for managing client accounts and controlling access to resources over data networks which includes a mechanism for sharing client information and charges among a plurality of service providers. A client who is registered with one of the service providers (the "home provider") is allowed to access the resources of the other service providers ("outside providers") that are part of the system. The system settles accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers. The outside providers are then paid for that access through the system. Thus, the system allows the providers to share users without requiring an open account for each user at each provider. The system includes a mechanism by which each provider can determine if a particular client is a member of the system, verify that the client has been authenticated by his home provider, and determine this client's access privileges and criteria.</p>
(d) a payment means adapted to assure that the outside providers are then paid for that access;	<p>[0010] It is a further object of the invention to provide a system which includes a payment means adapted to assure that the outside providers are then paid for access through the system.</p> <p>[0137] The service "settles" accounts receivable / accounts payable activity among the Clickshare Service Providers on a periodic basis. It interfaces to the Logging Facility database environment in an "off-line" (non real-time) manner. Activity reports are generated for all parties. An interface to the Automated Clearinghouse (ACH) allows fully automated settlement.</p>
(e) a sharing means adapted to allow the service providers to share users without requiring an open account for each user at each service provider; and	<p>[0011] It is a further object of the invention to provide a system which includes a sharing means adapted to allow the system to allow the providers to share users without requiring an open account for each user at each provider.</p> <p>[0017]</p>
(f) a verification means including a token and an	[0012] It is a further object of the invention to provide a system which includes a verification means adapted to

authentication server adapted to allow each service provider to determine if a particular client is registered by a home provider, verify that the client has authenticated at his home provider, and determine that client's access privileges and criteria.	allow each provider to determine if a particular client is a member of the system, verify that the client has been authenticated by his home provider, and determine this client's access privileges and criteria. [0017]
18. A method for managing client accounts and controlling access to resources over data networks, said method comprising:	[0006]
(a) sharing client information and charges among a plurality of service providers;	[0007]
(b) registering a client with one of the service providers (the "home provider") in a registration database, and allowing the client to access the resources of the other service providers ("outside providers"), each service provider maintaining an independent registration database of its clients;	[0155] [0273] [0367]
(c) settling accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers, by accessing a respective home provider registration database, and communicating with an accounting database maintained separately from a respective registration database;	[0009] [0017]
(d) assuring that the outside providers are paid for access by of a home provider for a client's access to the outside provider's resources;	[0010] [0137]
(e) allowing the providers to share users without requiring an open account for each user at each service provider; and	[0011] [0017]
(f) allowing each provider to	[0012]

determine if a particular client is registered, verifying that the client has authenticated at his home provider, and determining that client's access privileges and criteria.	[0017]
35. A method of providing an online service to a user over a public network, the online service provided by a Service Provider (SP) site to a user computer via the public network, the method comprising the steps of:	[0007] [0017] [0033] EASE OF USE--The consumer can leverage a single billing relationship with a most-trusted" Clickshare Service Provider--such as an ISP, telco, cable company or other billing entity--to purchase information at multiple web sites with single-ID and password convenience. No end-user software is required beyond a standard Web browser.
sending a request message from the user computer to the SP site over the public network to request the use of the online service;	[0364] To begin, the user points his WWW browser to the home page set up for him at his "home" Publishing Member (step 1). This page has been designated as "authentication required" by the Publishing Member, so the user's browser receives back from the Publishing Member's HTTP server an appropriate status message. The browser prompts the user for his user-name and password, which it then returns to the HTTP server as Request Header information.
generating a challenge message at the SP site in response to the request message and sending the challenge message over the public network to the user computer;	[0367] [0372] When the HTTP server receives the returned token, it is ready to deliver the requested content (as well as the token) to the requesting client. The content is delivered in the canonical HTTP method (accompanied by MIME Response Headers as appropriate). The Authentication token can be delivered to the user's client program (Mosaic, Netscape, Lynx, an "agent", etc.) in several ways. [0373] To accommodate current WWW browsers without modification, the Publishing Member's HTTP server "tags" all Clickshare URLs in the requested content with a query string that includes the token. However, this method is not ideal from a security standpoint, and presents difficulties if a rigid Content-Length needs to be enforced. A better model is to use HTTP 1.0 Request/Response Headers to transfer the token among parties "out of view". [See 5.18, above: "Other Modes for Transferring Token."

	<p>[0308] A better technique is to put the token in an Authentication request/response header. This technique is suggested in the recent IETF "Digest Authentication" draft, and a demonstration of this will be present in the early TVS service. If web browsers and other web clients widely adopt this technique (we think this is reasonably likely), this will limit certain forms of token theft.</p> <p>[0309] An even better technique, which would require special additional software on all web clients, is the combination of the Digest Authentication technique with a one-time password technique (as described in another IETF proposal from Bellcore). Using this technique, the TVS service could authorize a limited number of access attempts (say, 150) after which time the session is invalid. At each use, the client sends a one-time password, the "base" for which is pre-agreed (such that the server is able to correctly identify the "next" in a series). This has the additional advantage that authentication can be somewhat de-coupled from IP address (as is the case in the current TVS model).</p>
generating a response message in the user computer in response to the challenge message and sending the response message over the public network to the SP site, the response message including or being based upon an identifier of the user;	<p>[0367] [0373] [0308] [0309]</p> <p>[0126] When a user begins a session, his Publishing Member returns to him an authentication token (which he has received from TVS). The token contains information that identifies which TVS server originated the token, as well as information that identifies the associated user. The user (actually, his client browser) uses this token for all subsequent access to TVS-enabled publishers.</p>
sending at least the response message from the SP site to a remote online broker site, the online broker site having a brokering database which contains account information of registered users of an online brokering service of the online broker site;	<p>[0123] At the start of each session, this profile information is passed to the TVS server when the HTTP server requests an authentication token for the user. The information is loaded by the TVS server into a Dynamic Session Database. When, during the session, any Publishing Member requests that TVS validate this authentication, TVS returns the profile information to that Publisher as part of the authentication. Thus, even though each user is "owned" by only one Publishing Member (the "home"), all Publishing Members have access to that user's profile information through TVS.</p> <p>[0268] It is anticipated that the Clickshare Service will</p>

	<p>include a Clickshare Interchange Service [See FIG. 2, Service Model for Multiple Authentication/Logging Licensees], which will maintain a master database of IDs for Clickshare Publishing Members and Clickshare Service Providers and this master database will be periodically distributed in a secure manner to slave databases maintained by multiple Clickshare Authentication and Logging Servers (CALS). These CALS may be independently licensed and owned but will, using the TVS protocol, have the technical capability to authenticate each other's end users and relay real-time log reports for settlement. In effect, each CALS functions not only as a server to CSP and CPM clients, but also as a server to its peer CALS. Thus it is relatively transparent to each CALS whether it receive a token validation request or a log report from a CSP, a CPM or another CALS.</p> <p>[0298] The prototype implementation of the Clickshare/TVS service provides a Settlement Service as a distinct database-management application which operations in conjunction with the TVS logging engine. This Settlement Service stores records of user access to resources by Service Provider and by user within Service Provider and prepares the records for batch deliveries to the individual user's Service Provider. The Settlement Service also outputs charge records aggregated by Service Provider in a format which can be accepted by gateways to the U.S. banking industry's Automated Clearing House (ACH) service for electronic debiting and crediting of Service Provider and Publishing Member banking accounts. Finally, the Settlement Service outputs charge records aggregated by end user within Service Provider to a Billing Service in a format specific to the most common PC-based program for application of charges to credit-card gateways. Finally, Clickshare contemplates an interface for outputting individual, aggregated user charges in a format which can be employed by resellers of telephone company billing services to apply transactional charges to telephone bills or other billing facilities.</p>
processing the response message at the remote online broker site to determine whether the response message is authentic, the step of processing comprising accessing the account information in the brokering database;	<p>[0114] Using the TVS model, individual publishers or service providers authenticate their own users, and then ask TVS to store the user's preference, pricing and service-class information in a "publicly accessible" place. In return, TVS provides an authentication token which is returned to the user (specifically, the user's browser). All subsequent access to any TVS-enabled service is governed</p>

by this token (non-TVS services are not affected). TVS validates the token on behalf of any individual service, and passes in return the user's profile and class information. When a server has provided service to a validated user, that server returns to TVS a record of the service provided. This record is used by TVS to generate a number of forms of usage information, particularly billing and settlement information. Periodically, this information is returned to all publishers.

[0120] TVS introduces the notion of a "session" into the World Wide Web. Once a user is authenticated by his "home" Publishing Member, that Publishing Member provides user profile information to its TVS server, which returns an authentication token that is valid for a restricted period of time. Once given this token, the user can access any TVS-enabled HTTP server for the duration of validity without reauthentication. This time period is the "session". The user may directly end his session prior to the pre-determined time-out, but is not required to do so. Further, upon time-out-out, Clickshare can return the user to his "home" Publishing Member for re-authentication transparently. Thus, sessions can be concatenated as well.

[0123] At the start of each session, this profile information is passed to the TVS server when the HTTP server requests an authentication token for the user. The information is loaded by the TVS server into a Dynamic Session Database. When, during the session, any Publishing Member requests that TVS validate this authentication, TVS returns the profile information to that Publisher as part of the authentication. Thus, even though each user is "owned" by only one Publishing Member (the "home"), all Publishing Members have access to that user's profile information through TVS.

[0242] The current interface to the TVS service is through the World Wide Web, specifically servers offering the HyperText Transfer Protocol. Using both Uniform Resource Locators (URLs) and HTTP Request/Response Headers, the HTTP server communicates with client programs ("web browsers"). Separately, the HTTP server communicates with the TVS service using the TVS protocol. Thus, TVS is not dependent upon HTTP for anything beyond delivery/return of the Authentication Token to/from the HTTP server. The TVS service itself

	<p>(and the delivery interface in TVS "clients") will not be affected if new transfer protocols supersede HTTP.</p> <p>[0247] The Token Validation Service (TVS) handles user session management. After a TVS-enabled HTTP server authenticates a new user, it passes that user's profile information to Clickshare along with a request for a new authentication token. Thereafter, for the duration of that user's session, the Clickshare TVS server "validates" the user whenever the user presents a URL request to any TVS-enabled HTTP server.</p>
<p>sending a verification message from the remote online broker site to the SP site, the verification message indicating whether the response message is authentic;</p>	<p>[0247]</p>
<p>retrieving access rights data of the user from the brokering database if the response message is authentic, the access rights data specifies a plurality of content categories to which the user has access, the plurality of content categories corresponding to a plurality of different online services offered by the SP site;</p>	<p>[0006] [0012] [0017]</p> <p>[0031] ACCESS CONTROL--It permits a web site to differentiate requests for information by individual users rather than broad domains--even if the user has never registered with that particular web site. This "Service Class" technology avoids users having to maintain multiple IDs and passwords.</p> <p>[0079] The open-systems Internet offers a very different environment to users when compared with traditional consumer on-line services and Electronic Data Interchange (EDI) value-added networks (VANs). Specifically, the Internet environment is very decentralized, and no one organization controls the user base or access to resources. While this decentralization has tremendous advantages (chief among them, the freedom to select from a wide number of service and content offerings), This lack of "unity" can confuse and sometimes frustrate both potential information providers and users. In addition, the "stateless protocol" of the Internet presents difficulties for entities which need to know the identity and usage requirements of their service clients.</p> <p>[0080] A challenge is to provide a more unified user-access environment without destroying the freedom of</p>

	<p>choice inherent in the Internet model. Clickshare's effort in this arena is called the Clickshare/TVS Service--a network service that allows independent content and service providers to cooperate on user registration, user profiling and verification of site usage in a manner that allows:</p> <p>[0082] (b) Delivery of resources and the control of access according to the verified and submitted characteristics of the requesting user;</p> <p>[0083] (c) Transfer of data about user characteristics, including levels of authorization and service classes, among multiple service providers.</p> <p>[0084] (d) Central logging of access by users to system resources among multiple service providers for billing or other user-management or demographic purposes.</p> <p>[0128] The Clickshare Service has been designed as a distributed set of cooperating components that together provide an integrated user management environment. The initial focus of this environment is to provide micro-transaction settlement and audience measurement services to independent publishers and billing entities of all sizes and service volumes. However, the environment can also be used to control access to services or intangible goods based upon attributes of the requesting user as revealed to the proposed service provider via the authentication token. These services need not have any monetary value. Some of these components run on computers operated by Clickshare Service Providers (at sites not affiliated with Clickshare Corporation). These are called the client side components. The rest, currently, run at Clickshare Corporation's own site. These are the server site components.</p>
<p>sending the access rights data from the online broker site to the SP site;</p>	<p>[0114] Using the TVS model, individual publishers or service providers authenticate their own users, and then ask TVS to store the user's preference, pricing and service-class information in a "publicly accessible" place. In return, TVS provides an authentication token which is returned to the user (specifically, the user's browser). All subsequent access to any TVS-enabled service is governed by this token (non-TVS services are not affected). TVS validates the token on behalf of any individual service, and passes in return the user's profile and class</p>

	<p>information. When a server has provided service to a validated user, that server returns to TVS a record of the service provided. This record is used by TVS to generate a number of forms of usage information, particularly billing and settlement information. Periodically, this information is returned to all publishers.</p>
<p>providing the online service from the SP site to the user computer over the public network if the verification message indicates that the response message is authentic;</p>	<p>[0120] TVS introduces the notion of a "session" into the World Wide Web. Once a user is authenticated by his "home" Publishing Member, that Publishing Member provides user profile information to its TVS server, which returns an authentication token that is valid for a restricted period of time. Once given this token, the user can access any TVS-enabled HTTP server for the duration of validity without reauthentication. This time period is the "session". The user may directly end his session prior to the pre-determined time-out, but is not required to do so. Further, upon time-out-out, Clickshare can return the user to his "home" Publishing Member for re-authentication transparently. Thus, sessions can be concatenated as well.</p>
<p>denying access by the user to the online service if the verification message indicates that the response message is not authentic; and</p>	<p>[0176] /* These three requests are the bulk of the TVS service. They are called to obtain, validate, and invalidate user authentication tokens. */</p> <p>[0267] The HTTP server's actions of initiating a session with TVS and asking TVS to generate a new Authentication Token require communication with only one TVS server. However, a single TVS server cannot permanently serve more than a certain number of clients. Therefore, the service needs to scale (in terms of addition of servers) to provide service "bandwidth". Once such an multi-server environment is introduced, there will be inter-server communication--in addition to client/server communication--for the actions of validating and invalidating authentication tokens. The TVS wire protocol and server software are designed for this multi-server environment.</p> <p>[0269] The TVS client-side (HTTP server) architecture is designed so that on start-up (or soft restart) the HTTP server searches for it's service-provider from a local list of options. If, due to network or service host failure, the Clickshare authentication or logging facilities become unavailable, the HTTP server will restart and search for a new (available) service host. Since authentication tokens handed out by the now-dead TVS service are invalid, users will be returned to their home publishers to re-</p>

	<p>authenticate. This condition is handled gracefully through HTTP redirects, such that the user may not even see this condition (depends on the user's browser type). Independent of the number of TVS servers, and independent of the number of HTTP servers being served, at most two TVS servers will be involved in validating or invalidating a specific authentication token. Thus, there will be at most four (4) packet transmissions required for the most-commonly occurring activity (validation), assuming no retransmissions.</p> <p>[0349] 6.1.7. CALSb attempts to un-encode the UDP-transmitted session token and, doing so successfully, finds, by referring to a database table of global CALS provided and updated by CIS, determines that it was generated by CALSa. Since the CALSb dynamic session database does not contain user-profile information for CMa, CALSb relays the token to CALSa for authentication via a UDP connection which it opens for this purpose. By this process, CALSa becomes financially responsible for the purchases of CMa globally. If CALSb is unable to un-encode the session token, it is discarded and CPMb is told that the user making the information request cannot be authenticated.</p> <p>[0390] A similar process works when completely invalid tokens are presented to TVS for verification. In such cases, TVS instructs the HTTP server to redirect the user to known points (in the current case, to Clickshare Service Corp.'s pages) such that the user can return "home" himself, or can select a "home" if necessary.</p>
<p>updating a settling database at a settlor site, with a charge related to the user computer access to the SP site, the settlor site being maintained separately from the remote online broker site.</p>	<p>[0009] [0017] [0114] [0137] [0298]</p>
<p>49. A method providing a fee-based online service from a Service Provider (SP) site to a user over a public network while concealing the payment and personal information of the user from the Service Provider, comprising the steps of:</p>	<p>[0096] In providing the TVS service, Clickshare Corporation or its licensee maintains only transitory knowledge of any specific user, and even then, only by a user identification number (not by demographic or financial information).</p>

registering a user at a registration site that provides a registration service, the registration site having a registration database which contains registration information on the user and on other users of the online service, the registration site being located remotely from the SP site;	[0155] [0273] [0367]
providing an online broker site that provides an online brokering service, the online broker site having a brokering database which contains account information on the user and on other users of the online brokering service, the online broker site being located remotely from the SP site and the registration site;	[0123] [0268] [0298]
establishing a connection between a computer of the user ("user computer") and the SP site over at least the public network;	[0367] [0373] [0308] [0309] [0126]
generating an encrypted authentication message at the user computer and sending the authentication message to the registration site via at least the public network;	[0303] In the current implementation of the TVS service, almost no encryption is used. The only transacted item that is encrypted is the authentication token which travels along with each user request. This token is issued by the Clickshare/TVS authentication server, and only that server needs to "decrypt" it. All other parties (HTTP servers, and other TVS servers) treat the token as "opaque". Since only the originating TVS server will view the contents of the authentication token, a "private key" encryption algorithm can be used. That private key is stored on the authentication server which originates the token, and remains valid only for the duration of that user's session.
verifying the authentication message at the registration site to thereby authenticate the user, the step of verifying comprising accessing the account information of the user stored in the registration database;	[0247]
generating an anonymous ID at the registration site and sending the anonymous ID to the	[0104] The TVS model does not enforce a specific privacy model. The service itself operates by identifier numbers, not by names, and Clickshare Service Corp.--on its own--

<p>SP site to allow the SP site to impose a charge the user for the online service;</p>	<p>will not be able to correlate an ID with a person. However, nothing inherent in the TVS service specifically prevents a Publishing Member from making this correlation on his own through methods unrelated to the Clickshare service. It is possible within the design of TVS to offer a "Swiss-bank" type of "blind usage" for users that wish to pay for same. No such service is currently implemented.</p> <p>[0118] To differentiate individual customers (called "User Members"), each is assigned an ID number, and similarly each content provider (called a "Publishing Member") is assigned a unique ID. Though an individual customer may have several accounts, each has a separate User Member ID (UID). Each of these IDs is assigned to a specific Publishing Member ID (PMID). This association is referred to as the user's "home". The TVS concept that each user has a "home" is important as it localizes the service to an individual Publishing Member and allows for graceful support of a number of error conditions that might occur with such a widely distributed user base.</p> <p>[0124] When a user's session expires, TVS drops that user's profile from the dynamic session database (though portions of it are logged in a service record). Thus, TVS has no permanent record of any individual user. The profile information passed to Clickshare by the Publishing Member's HTTP server does not include personal information that would allow a user to be identified by name or financial association. Clickshare indexes profile information by UID+PMID only.</p>
<p>providing the online service from the SP site to the user computer over the public network;</p>	<p>[0120]</p>
<p>generating a billing event at the SP site and sending the billing event to the online broker site, the billing event specifying at least (1) the anonymous ID, and (2) a monetary charge to be applied to an account of the user in the brokering database.</p>	<p>[0009] [0017] [0114] [0137] [0275] The service envisions that some end users will wish to query, through an HTML-forms interface or otherwise, the filtered server log databases, to determine charges which have been applied to the user's Clickshare ID number since the last settlement to a billing/credit facility. This application will require a separate real-time application which is aware of the pricing rules being applied by the end user's Clickshare Service Provider--and to which the end-user has "subscribed" or enrolled--</p>

	<p>providing the application with the end user's globally unique Clickshare ID number. When queried, the application can parse from the owning service provider's server active log database all records associated with access by the querying user's Clickshare ID number and present them in an HTML form for review. The purpose of this application is to permit users to gauge their rate of resource usage, or permit Clickshare Service Providers to apply session-based charges against billing or credit facilities--including smart cards--during periods between off-line system settlement.</p> <p>[0298]</p>
63. A system for allowing users to securely access online service providers over an untrusted distributed network, comprising:	[0006]
a plurality of Service Provider (SP) sites connected to the distributed network, each SP site running at least one service application to provide an online service to users over the distributed network;	[0007]
a plurality of user computers connected to the distributed network, each user computer running at least one client application for accessing online services of the SP sites;	[0011] It is a further object of the invention to provide a system which includes a sharing means adapted to allow the system to allow the providers to share users without requiring an open account for each user at each provider.
an online broker site connected to the plurality of SP sites, the online broker site running at least one brokering application to provide an online brokering service to account for use of the online services by respective users, the SP sites optionally including a user database containing user-specific authentication information of users that have registered with an SP site, the registered users accessing the SP sites from the users computers over the distributed network; and	<p>[0083]</p> <p>[0123]</p> <p>[0268]</p> <p>[0298]</p>

<p>an authentication protocol for allowing the SP site to authenticate registered users in response to user-specific authentication requests from the SP sites, the authentication requests responsive to requests from the user computers to access the online services of the SP sites, the authentication protocol implemented by software components of the user computers, the SP sites, and the online broker site.</p>	<p>[0017] [0120] [0155] [0247] [0367]</p>
<p>69. A method providing a fee-based online service from a Service Provider (SP) site to a user over a distributed network while concealing the payment and personal information of the user from the Service Provider, comprising the steps of:</p>	<p>[0096]</p>
<p>providing a registration site that provides a registration service, the registration site having a registration database which contains registration information on the user and on other users of the online service, the registration site being located remotely from the SP site;</p>	<p>[0155] [0273] [0367]</p>
<p>providing an online broker site that provides an online brokering service, the online broker site having a brokering database which contains account information on the user and on other users of the online brokering service, the online broker site located remotely from the SP site and the registration site;</p>	<p>[0123] [0268] [0298]</p>
<p>sending an access request from a computer of the user ("user computer") over the distributed network to the SP site;</p>	<p>[0303] [0364]</p>
<p>sending an authentication request from the SP site to the</p>	<p>[0123] [0268]</p>

registration site in response to the access request;	[0298]
prompting the user for a user identifier at the user computer and sending the user identifier to the registration site;	[0364] To begin, the user points his WWW browser to the home page set up for him at his "home" Publishing Member (step 1). This page has been designated as "authentication required" by the Publishing Member, so the user's browser receives back from the Publishing Member's HTTP server an appropriate status message. The browser prompts the user for his user-name and password, which it then returns to the HTTP server as Request Header information.
authenticating the user at the registration site in response to the authentication request, the step of authenticating comprising using the user identifier sent from the user computer to access the account information stored within the registration database;	[0114] [0120] [0123] [0242] [0247]
sending a verification message from the registration site to the SP site in response to the authentication request, the verification message indicating whether the step of authenticating was successful;	[0247]
retrieving access rights data of the user from the registration database if the step of authenticating is successful, the access rights data specifying a plurality of access rights of the user with respect to the online service and/or the SP site;	[0006] [0012] [0017] [0031] [0079] [0080] [0082] [0083] [0084] [0128]
sending the plurality of access rights data from the registration site to the SP site to anonymously inform the SP site of the access rights of the user;	[0104] [0114] [0118] [0124]
providing the fee-based online service from the SP site to the user computer over the distributed network only if the verification message indicates that	[0120] [0247] [0267]

the step of authenticating was successful;	
generation a billing event at the SP site and sending the billing event to the online broker site, the billing event anonymously identifying the user to the online brokering service, the billing event including a charge for the providing of the online service to the user computer; and	[0155] [0273] [0298]
updating an account of the user at the online broker site to reflect the charge included within the billing event.	[0009] [0017] [0114] [0137]
71. An online brokering service for allowing users of a public network to anonymously purchase online services from Service Provider (SP) sites on the public network, the online brokering service provided from an online broker site and a registration site that are each located separately and remotely from the SP sites, the online brokering service comprising:	[0007] [0017] [0033] [0104] [0118] [0124]
a database at the registration site which contains account information of users that have registered with online brokering service, the account information including at least a unique identifier of each registered user;	[0155] [0273] [0367]
a billing system at the online broker site for recording monetary charges to accounts of registered users, the monetary charges corresponding to online services purchased from the SP sites over the public network;	[0009] [0010] [0017] [0137]
a software package running at the online broker site, the brokerage software package performing at least the following	[0020] TVS servers are operated by any Clickshare-authorized licensee of the server-side software The "clients" of this service are, currently, HyperText Transfer Protocol (HTTP) servers operated by licensed, but

functions:	otherwise independent, content providers. HTTP is the supporting protocol for the World Wide Web, the Internet's popular user environment.
(a) receiving identifying information about the user generated at the registration site to correlate an anonymous ID of a registered user with an identification of an account of a registered user;	[0104] [0118] [0124] [0155]
(b) receiving user-specific billing events from the SP sites and passing the billing events to the billing system to update the accounts of registered users, each billing event specifying at least (1) an anonymous ID of a registered user, and (2) a charge to be applied to the account of the registered user; and	[009] [0017] [0114] [0137] [0275] [0298]
a software package running at the registration site, the registration software package performing at least the following functions:	[0020]
(a) authenticating registered users in response to authentication requests received from the SP sites, the authentication requests generated in response to attempts by registered users to access online services of the SP sites, said authenticating comprising accessing the database to verify user account information;	[0155] [0367]
(b) retrieving user-specific access rights data from the database in response to requests from the SP sites and transmitting the access rights data to the SP sites, the access rights data specifying a plurality of content categories or services to which a registered user has access and enabling the SP sites to provide customized access rights to the registered users; and	[0006] [0012] [0017] [0031] [0079] [0080] [0082] [0083] [0084] [0128]

(c) generating an anonymous ID of a registered user for use by the SP sites and communicating the identifying information for correlating the anonymous ID with an identification of an account of a registered user to the online brokerage site.	[0104] [0118] [0124]
75. A virtual online services network for allowing users to directly access service provider (SP) sites over a public network, comprising:	[0006] [0007]
an online brokering service running on at least one site of a computer network, the online brokering service storing billing information for a plurality of users of the public network, the online brokering service providing online access by the users to account-specific billing information;	[0123] [0268] [0298]
a registration service running on at least one site of a computer network, and being separate from the online brokering service, the registration service storing account information for a plurality of users of the public network, each of the users having a respective account with the online brokering service;	[0155] [0273] [0376]
a plurality of fee-based online services running on a plurality of independent service provider (SP) sites on the public network, the SP sites directly accessible to the users over the public network, each SP site being registered with the online brokering service and the registration service, and being configured to use the registration service to authenticate the users when the users connect to	[0006] [0012] [0017] [0031] [0080] [0114] [0120] [0137] [0275] [0298]

the SP sites over the public network, the fee-based services configured to generate account-specific billing events in response to uses of the online services by the users and to forward the billing events to the online brokering service so that the users are billed for the online services from a centralized billing location; and	
a log-on protocol which allows the users to access the plurality of online services using their respective accounts, the log-on protocol configured to (1) prompt a user for an account identifier, (2) cache the account identifier during the course of a user log-on session, and (3) use the cached account identifier to access multiple different SP sites, the log-on protocol thereby allowing the user to seamlessly access the plurality of fee-based online services following a single log-on event;	<p>[0028] The Clickshare/TVS Service is a distributed user-management service for Internet information micropayments, access control, audience measurement and personalization with one-ID, one-bill user convenience. It is designed to address the problem of how to charge Internet users for their use of resources and control their access to those resources. It is also designed to provide for the transfer of information about users among multiple web sites in order to control access or define service authorization. TVS enables:</p> <p>[0033] [0123] [0124] [0126]</p> <p>[0263] Since the TVS service is provided on machines separate from the HTTP servers, there is a possibility that either machine failure or network outage may make the service unavailable temporarily. In such cases, the HTTP server will issue itself a "restart" which will attempt to reconnect the server to another TVS server on another part of the network. Users with active sessions will have to re-authenticate with their home publisher, but this is transparent given graceful handling by the TVS client web server and caching of username/password in most browsers.</p>
wherein the registration service stores user-specific access rights data, and provides the access rights data specifying access rights for a plurality of online services for a specific user to the SP sites in response to requests from the SP sites, and wherein the fee-based online services are configured to	<p>[0012] [0017] [0155] [0273] [0376]</p>

use the access rights data to automatically provide user-customized services to the users.	
79. An apparatus comprising:	
a broker server operatively connected to a computer network, the broker server having a processor and a computer readable memory, the memory storing broker server implementation software, including customer access software, and at least one broker data structure;	[0006] [0012] [0017] [0114] [0123] [0268] [0298]
a registration server operatively connected to a computer network, maintained separately from the broker server, the registration server having a processor and a computer readable memory, the memory storing registration server implementation software, including customer access software, and at least one registration data structure;	[0155] [0273] [0367]
the at least one broker data structure including a list ID and account information for a plurality of registered customers;	[0123] [0128] The Clickshare Service has been designed as a distributed set of cooperating components that together provide an integrated user management environment. The initial focus of this environment is to provide micro-transaction settlement and audience measurement services to independent publishers and billing entities of all sizes and service volumes. However, the environment can also be used to control access to services or intangible goods based upon attributes of the requesting user as revealed to the proposed service provider via the authentication token. These services need not have any monetary value. Some of these components run on computers operated by Clickshare Service Providers (at sites not affiliated with Clickshare Corporation). These are called the client side components. The rest, currently, run at Clickshare Corporation's own site. These are the server site components.

	[0268] [0298]
the at least one registration data structure including registration data of a plurality of a plurality of registered customers, the at least one data structure further comprising access rights relating to a plurality of online services;	[0006] [0012] [0031] [0079] [0080] [0082] [0083] [0084] [0017] [0128]
whereby the registration server facilitates seamless connection between a selected registered customer and an online site to create a virtual online service, including anonymously providing the selected customer's access rights to the plurality of online services provided by the selected online site, and	[0028] [0033] [0123] [0124] [0126] [0263]
whereby the broker server receives anonymous accounting information from the online site for charges of a customer and receives identifying information from the registration server to permit updating of account information for a respective registered customer.	[0104] [0114] [0118] [0124] [0137] [0275] [0298]
81. A system, comprising:	
(a) a plurality of separate user registration databases, each storing a plurality of user identifications, including user account reference information;	[0155] [0273] [0367]
(b) a provider interface, through which a plurality of providers issue requests to post a transaction to a particular user account, without requiring knowledge of a respective user identity;	[0010] [0011] [0017] [0123] [0137] [0268] [0298]
(c) a settlement server,	[0009]

receiving said requests, accessing at least one of said user registration databases, and communicating said request and an user identity to one of a plurality of user account databases; and	[0017] [0114] [0137] [0268] [0273] [0298]
(d) said user registration databases and said user account databases being independent and remotely located with respect to each other.	[0114]
82. A method, comprising:	
(a) recording a user identification, including user account reference information, into one of a plurality of separately maintained user registration databases;	[0114] [0273]
(b) issuing a request to post a transaction to a particular user account, without requiring knowledge of a respective user identity by a posting party;	[0009] [0104] [0118] [0123] [0126]
(c) at a settlement server:	[0298]
(i) receiving the request from the posting party,	[0364]
(ii) accessing at least one of the user registration databases, and	[0155] [0273] [0367]
(iii) communicating the request and an user identity to corresponding one of a plurality of user account databases; and	[0123] [0126] [0268] [0308] [0309] [0367] [0373]
(d) independently maintaining the user registration databases and the user account databases at remote locations.	[0009] [0012] [0017] [0128]

(vi) Grounds of rejection to be reviewed on appeal. A concise statement of each ground of rejection presented for review.

1. Claims 1-8, 11-25, 28-34, 63-64, 66-72 and 74-82 are rejected under 35 U.S.C. § 102(b) as being anticipated by Exhibit O (“Clickshare(sm) Alpha up; “test drives available”, Newshare Corp. Release, October 26, 1995)

2. Claims 9-10 and 26-27 are rejected under 35 U.S.C. § 103(a) as being obvious over Exhibit O in view of Exhibit L (“Questions Often Asked By Prospective Clickshare Publishers”, Newshare Release, Copyright 1995).

3. Claims 36-62 are rejected under 35 U.S.C. § 103(a) as being obvious over Exhibit O in view of Teper (U.S. 5,815,665).

4. Claims 65 and 73 are rejected under 35 U.S.C. § 103(a) as being obvious over Exhibit O in view of Teper (U.S. 5,815,665) as applied to claims 64 and 71, and further in view of Exhibit L.

(vii) Argument.

INTRODUCTION

The Examiner is incorrect in his analysis of Exhibit “O”. This exhibit clearly states that the micropayment system was **not implemented** at the time of writing. “Transaction-handling capabilities, and an initial base of Publishing Members, **will be** launched in early 1996... At that point, publishers will be able to sell each others' information for as little as a dime per click, exchanging royalties and commissions seamlessly," added Densmore.” Therefore, the reference cannot be interpreted to “disclose” that which it admits does not exist. Likewise, applicants have presented evidence in the form of a Declaration from the inventors that the technology remained experimental, at best, and was not yet reduced to practice, nor ready for patenting, as of the date of Exhibit O.

Indeed, it is clear that Exhibit “O” does not disclose any details, and merely proposes an ideal or project definition to be met by the ultimate product and service. The Examiner’s statement on page 17 of the office action that Exhibit “O” is “enabling” is unsupported and lacking any factual analysis, and in the presence of a factual challenge by applicants, must be further elucidated.

The reference is therefore, at best, an invitation to experiment, and not a recipe for reducing the invention to practice, in a manner which would enable one of ordinary skill in the art to practice the invention. It is well established law that the mere statement of a problem to be solved does not anticipate the solution to that problem, and the rejection is therefore dependent on whether a person of ordinary skill in the art, at the time of the invention, would have sufficiently possessed the invention to render it obvious. Applicants respectfully submit that, in the present case, they did not.

In fact, the invention was intended for use over a public network, such as the Internet, and the mere theoretical aggregation of aspects and intended outcomes is insufficient to define a workable embodiment, since such issues as lost packets, protocol overhead, browser behavior, firewalls, network congestion, compatibility and relationships among various parties, contention of multiple processes for limited resources, all had to be considered in order to determine whether the architecture was suitable for its intended purpose. As of the date of the reference, this is clearly not established, and applicant should not be penalized for delaying filing of the patent application until after the invention was proven to be operable for its intended purpose. Prior art under § 102(b) must sufficiently describe a claimed invention to have placed the public in possession of that invention. In re Donohue, 766 F.2d 531, 533 (Fed. Cir. 1985); In re Samour, 571 F.2d 559, 562 (CCPA 1978). The proper test of a publication as a § 102(b) bar is “whether one skilled in the art to which the invention pertains could take the description of the invention in the printed publication and combine it with his own knowledge of the particular art and from this combination be put in possession of the invention on which a patent is sought.” In re LeGrice, 301 F.2d 929, 939 (CCPA 1962). In particular, one must be able to make the claimed invention without undue experimentation. In Re Elsner, 381 F.3d 1125, 1126, 72 USPQ2d 1038, 1040 (Fed. Cir. 2004). See also, In re Kumar, 418 F.3d 1361, 1368 (Fed. Cir. 2005)(“[I]n order to render an invention unpatentable for obviousness, the prior art must enable a person of ordinary skill to make and use the invention.”) (citing Beckman Instruments, Inc. v. LKB Produkter AB, 892 F.2d 1547, 1551 (Fed. Cir. 1989)).

Exhibit O clearly does not enable the practice of the present invention, and merely describes a high level architecture without sufficient specificity. One seeking to implement the invention based on the description provided would have required the exercise of inventive skill.

Applicants therefore respectfully submit that Exhibit “O” is not enabling (even for the system alluded to within its scope); that it does not disclose the entirety of the presently claimed invention, and further that the use of this document is but an invitation to experiment, and not a disclosure of the result of a substantial development effort, which resulted in the present invention.

1. Claims 1-8, 11-25, 28-34, 63-64, 66-72 and 74-82 are rejected under 35 U.S.C. § 102(b) as being anticipated by Exhibit O (“Clickshare (sm) Alpha up; “test drives available”, Newshare Corp. Release, October 26, 1995)

CLAIMS 1 AND 5

Exhibit O fails to teach or suggest substantial elements of claim 1, and such deficiencies are not remediated by any of the other references of record. For example, element “c” of claim 1 requires “a settling means, separate from a respective home provider, for settling accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers, the settling means accessing a respective home provider registration database, and communicating with an accounting database maintained separately from a respective registration database”. The examiner proposes that the following excerpt from Exhibit “O” teaches this element: “Clickshare tracks content served to users regardless of the location of their “home” Publishing Member. Aggregate micro-charges, settled monthly or more frequently, allocating commissions, royalties and transaction fees, thus form the basis of a system resembling an ATM network.” In fact, this excerpt (and the remainder of Exhibit “O”, fail to teach or suggest a settling means for accessing a respective home provider registration database, or a separation of the accounting database and the registration database – a key distinguishing feature of the invention.

The Examiner addresses this issue on page 17 of the Office Action; however, applicants respectfully request reconsideration thereof. While Exhibit “O” proposes that the aggregate microcharges “are” settled monthly or more frequently (in spite of its inconsistent statement that “Transaction-handling capabilities, and an initial base of Publishing Members, will be launched in early 1996”... “At that point, publishers will be able to sell each others’

information for as little as a dime per click, exchanging royalties and commissions seamlessly”) it fails to indicate the architectural features as claimed by applicant. It is respectfully submitted that these features are neither taught nor suggested by the reference.

Element “d” of claim 1 requires “a payment means adapted to assure that the outside providers are then paid for that access.” The excerpt of Exhibit “O” cited by the examiner allegedly corresponding to this element provides: “A portion of all fees accumulated by a user for all visited Clickshare-enabled sites is retained by the user's home Publishing Member. This is termed a “referral commission.” And Newshare retains a portion for its role in tracking and clearing transactions. At least 50 percent of each transaction goes to the content owner as a royalty.” It is not seen how this disclosure supports the required “assurance” as contrasted with the stated intent to compensate the content owner. While a skilled artisan might set out to construct such a payment system to assure payment, it is respectfully submitted that the features required, within the context of the present invention, to “assure” payment, would require the exercise of inventive skill, for example, to consider such issues as redistribution of content, search engine spiders, browser page refresh, etc. Further, the excerpt teaches a suggested implementation of business and financial relationships among parties which would be supported by the system, not the workings of the system itself.

Element “e” of claim 1 requires “a verification means ... to ... determine that client's access privileges and criteria.” The allegedly corresponding excerpt from Exhibit “O” states: “The second piece of essential software, the Clickshare token-validation service (TVS) server, is run by Newshare Corp. or licensees. It creates and validates authentication tokens, brokers non-personal user preferences among publishers, and maintains “page visit” records from multiple independent sites sortable by anonymous user number, page visited and site ID.” It is not seen

how Exhibit “O” discloses client access privileges or criteria, nor how tokens are created or validated, nor where page visit records originated, transferred or stored.

Exhibit O does not provide an enabling disclosure of any transaction-handling system in accordance with claim 1. It merely prophesizes that such a capability would be available at some time in the future.

A particular issue presented is that a user is anonymous to the TVS server, yet this server would be responsible for aggregating payments chargeable to the individual users. Meanwhile, there is no discussion in Exhibit O regarding protection of information, such as user validation token, while in transit over a public network. Therefore, a significant security hole is not addressed, without a solution to which, the system as presented would be unsuitable for actual payments. This significant issue was but one that was being researched by the Inventors after Exhibit O was published, and this additional work required the exercise of inventive skill. Note that element (d) requires “means adapted to assure”, which requires that the system address known impediments to obtain reasonable assurance.

In reviewing Exhibit “O”, it is apparent that various elements of claim 1 appear to be drafted in accordance with 35 U.S.C. § 112, sixth paragraph (means plus function), e.g., “payment means”, and applicant is entitled to a claim scope commensurate with its disclosure. Therefore, since Exhibit “O” discloses no corresponding structures, it does not anticipate the claim as properly interpreted. Likewise, it does not render the claim obvious, since one of ordinary skill in the art would not have been enabled by the prior art, including Exhibit “O”, to make and use the invention at that time. See, In re Kollar, 286 F.3d 1326, 1329 (Fed. Cir. 2002); Minn. Mining & Mfg. Co. v. Chemque, Inc., 303 F.3d 1294, 1301 (Fed. Cir. 2002).

CLAIM 2

Claim 2 provides that an owner of goods sells access to those goods across a data network such that the owner may instantaneously and simultaneously display across the network multiple differing prices of the same good or classes of goods. This is neither taught nor suggested by the reference.

CLAIM 3

Claim 3 provides means by which a service provider instantaneously configures the form and substance of services or goods across a data network provided to different or unique clients in response to data accompanying the client's request for service. This is neither taught nor suggested by the reference.

CLAIM 4

Claim 4 provides a means by which a service provider instantaneously determines whether or what type or form of service or goods across a data network to provide to different or unique clients based upon data about the client provided along with the client's request for service. This is neither taught nor suggested by the reference.

CLAIM 6

Claim 6 provides means by which a service providers request access to, review of, or purchase of resources or goods across a data network of clients on the basis of specific attributes of the client which the client elects to provide at the moment when service is requested, where such attributes are technically capable of being an integral and automatic part of the request

form. This is neither taught nor suggested by the reference.

CLAIM 7

Claim 7 provides means by which a home provider provides a client's preference, pricing and service-class information to a common service point in exchange for an authenticatable token, which the home provider then provides to its client, so that the client may in turn offer the token to multiple outside providers whose services or goods across a data network the client wishes to access, review or purchase. This is neither taught nor suggested by the reference.

CLAIM 8

Claim 8 provides a system employs the Internet's Hyper-Text Transfer Protocol (HTTP), and has appending means adapted to appending to or include in the user computer a Uniform Resource Locator (URL), or in a Request/Response Header, a sequence of alpha-numeric characters which includes said authenticatable token. This is neither taught nor suggested by the reference.

CLAIM 11

Claim 11 provides a system for collecting and storing at a common service point discrete records of access by clients to resources or goods across a data network of multiple service providers, where such collection is capable of occurring instantaneously subsequent to the providing of each resource or good. This is neither taught nor suggested by the reference.

CLAIM 12

Claim 12 provides means by which discrete records are instantaneously sorted and stored in databases according to the identity of the home provider. This is neither taught nor suggested by the reference.

CLAIM 13

Claim 13 provides means for collecting and aggregating records of financial charges for access to, review or acquisition of services or goods across a data network such that the records may be supplied to the suppliers of client servers without knowledge of or reference to the ultimate form of payment by the client. This is neither taught nor suggested by the reference.

CLAIM 14

Claim 14 provides a system in which said token is only "read" by said authentication server, thus permitting the token to be private-key encrypted. This is neither taught nor suggested by the reference.

CLAIM 15

Claim 15 provides a system in which said client comprises an end user and has an end user's account and an end user's account manager, for enabling an initiating Internet World Wide Web host to present in HyperText Markup Language (HTML) "hypertext links" which address services or goods available from multiple other receiving World Wide Web sites such that when the end user highlights or clicks the link a process is initiated whereby the receiving site is able to bill the end user's account manager for access to, review or acquisition of the services or goods, without regard to whether the end user's account is maintained by the initiating WWW

host or by some other service provider. This is neither taught nor suggested by the reference.

CLAIM 16

Claim 16 provides a system which includes a sequence means adapted for obtaining, transferring and maintaining among multiple service providers a unique alpha-numeric sequence associated with a specific digital information resource or object for a purpose; where the topological location of the resource on the network may not necessarily be related or relevant to the location where, or time when, the resource was originally created. This is neither taught nor suggested by the reference.

CLAIM 17

Claim 17 provides a system which includes a sequence means adapted for obtaining, transferring and maintaining among multiple service providers a dynamically updated record of funds encumbered by a network user for the purchase of a digital information resource or resources, such that each subsequent record of purchase in time, and the transfer to clients of an updated record of funds available or authorized to be encumbered, is accomplished. This is neither taught nor suggested by the reference.

CLAIMS 18 AND 22

Exhibit O does not provide an enabling disclosure of any method for managing client accounts and controlling access to resources over data networks in accordance with claim 18. It merely prophesizes that the accounting capabilities would be available at some time in the future.

A particular issue presented is that the communication network is insecure, and there is

no teaching or suggestion how this could be effectively used in an automated transaction accounting method without providing security for the token information. There is no discussion in Exhibit O regarding protection of information, such as user validation token, while in transit over a public network. Therefore, a significant security hole is not addressed, without a solution to which, the system as presented would be unsuitable for actual payments. This significant issue was but one that was being researched by the Inventors after Exhibit O was published, and this additional work required the exercise of inventive skill. Note that element (d) requires “assuring”, a step which requires that the method address known impediments to obtain reasonable assurance.

These limitations are not merely implicit in the claim. The following elements are neither taught nor suggested in Exhibit O:

(c) settling accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers, by accessing a respective home provider registration database, and communicating with an accounting database maintained separately from a respective registration database;

(d) assuring that the outside providers are paid for access by of a home provider for a client’s access to the outside provider’s resources;

(f) allowing each provider to determine if a particular client is registered, verifying that the client has authenticated at his home provider, and determining that client’s access privileges and criteria.

CLAIM 19

Claim 19 provides a method by which the owner of goods sells access to those goods

across a data network such that the owner may instantaneously and simultaneously display across the network multiple differing prices of the same good or classes of goods. This is neither taught nor suggested by the reference.

CLAIM 20

Claim 20 provides a method by which a service provider instantaneously configures the form and substance of services or goods across a data network provided to different or unique clients in response to data about the client accompanying the client's request for service. This is neither taught nor suggested by the reference.

CLAIM 21

Claim 21 provides a method by which a service provider instantaneously determines whether or what type or form of service or goods across a data network to provide to different or unique clients based upon data about the client accompanying the client's request for service. This is neither taught nor suggested by the reference.

CLAIM 23

Claim 23 provides a method in which a service provider requests access to, review of, or purchase of resources or goods across a data network on the basis of specific attributes of the client which the client elects to provide at the moment when service is requested, where such attributes are technically capable of being an integral and automatic part of the request form. This is neither taught nor suggested by the reference.

CLAIM 24

Claim 24 provides method in which a home provider provides a client's preference, pricing and service-class information to a common service point in exchange for an authenticatable token, which the home provider then provides to its client, so that the client may in turn offer the token to multiple outside providers whose services or goods across a data network the client wishes to access, review or purchase. This is neither taught nor suggested by the reference.

CLAIM 25

Claim 25 provides a method employing the Internet's Hyper-Text Transfer Protocol (HTTP), of appending to or including in a Uniform Resource Locator (URL), or in a Request/Response Header, a sequence of alpha-numeric characters which includes said authenticatable token. This is neither taught nor suggested by the reference.

CLAIM 28

Claim 28 provides a method for collecting and storing at a common service point discrete records of access by clients to resources or goods across a data network of multiple service providers, where such collection is capable of occurring instantaneously subsequent to the providing of each resource or good. This is neither taught nor suggested by the reference.

CLAIM 29

Claim 29 provides a method by which discrete records are instantaneously sorted and stored in databases according to the identity of the service provider of the individual client whose

activity resulted in the record being produced. This is neither taught nor suggested by the reference.

CLAIM 30

Claim 30 provides a method for collecting and aggregating records of financial charges for access to, review or acquisition of services or goods across a data network such that the records may be supplied to the suppliers of client services without knowledge of or reference to the ultimate form of payment by the client. This is neither taught nor suggested by the reference.

CLAIM 31

Claim 31 provides a method in which said token is only "read" by said authentication server, thus permitting the token to be private-key encrypted. This is neither taught nor suggested by the reference.

CLAIM 32

Claim 32 provides a method wherein which said client comprises an end user and has an end user's account and an end user's account manager, for enabling an initiating Internet World Wide Web host to present in HyperText Markup Language (HTML) "hypertext links" which address services or goods available from multiple other receiving World Wide Web sites such that when the end user highlights or clicks the link a process is initiated whereby the receiving site is able to bill the end user's account manager for access to, review or acquisition of the services or goods, without regard to whether the end user's account is maintained by the initiating WWW host or by some other service provider. This is neither taught nor suggested by

the reference.

CLAIM 33

Claim 33 provides a method including the step of obtaining, transferring and maintaining among multiple service providers a unique alpha-numeric sequence associated with a specific digital information resource or object for a purpose; where the topological location of the resource on the network may not necessarily be related or relevant to the location where, or time when, the resource was originally created. This is neither taught nor suggested by the reference.

CLAIM 34

Claim 34 provides a method which includes sequence steps for obtaining, transferring and maintaining among multiple service providers a dynamically updated record of funds encumbered by a client for the purchase of a digital information resource or resources such that each subsequent record of purchase in time, and the transfer to clients of an updated record of funds available or authorized to be encumbered, is accomplished. This is neither taught nor suggested by the reference.

CLAIMS 35 AND 36 AND 47

Exhibit O does not provide an enabling disclosure of any method involving a settler site having a settling database. The TVS as disclosed does not teach or suggest the critical limitations of: “updating a settling database at a settlor site, with a charge related to the user computer access to the SP site, the settlor site being maintained separately from the remote online broker site.” It merely prophesizes that accounting capabilities would be available at some time in the future,

but does not disclose what form these might take and how they might be implemented.

Claim 35 also provides a challenge-response authentication/validation protocol, which is neither taught nor suggested by Exhibit O:

sending a request message from the user computer to the SP site over the public network to request the use of the online service;

generating a challenge message at the SP site in response to the request message and sending the challenge message over the public network to the user computer;

generating a response message in the user computer in response to the challenge message and sending the response message over the public network to the SP site, the response message including or being based upon an identifier of the user;

sending at least the response message from the SP site to a remote online broker site, the online broker site having a brokering database which contains account information of registered users of an online brokering service of the online broker site;

processing the response message at the remote online broker site to determine whether the response message is authentic, the step of processing comprising accessing the account information in the brokering database;

sending a verification message from the remote online broker site to the SP site, the verification message indicating whether the response message is authentic; ...

providing the online service from the SP site to the user computer over the public network if the verification message indicates that the response message is authentic;

denying access by the user to the online service if the verification message indicates that the response message is not authentic; and

Further, claim 35 also provides user-specific “access rights”, which are neither taught nor suggested by the reference:

retrieving access rights data of the user from the brokering database if the response message is authentic, the access rights data specifies a plurality of content categories to which the user has access, the plurality of content categories corresponding to a plurality of different online services offered by the SP site;

sending the access rights data from the online broker site to the SP site;

CLAIM 63 AND 68

Claim 63 provides a system for allowing users to securely access online service providers over an untrusted distributed network. There is no teaching or suggestion in Exhibit O as to how security can be achieved absent a trusted network, and is therefore distinguished.

Claim 63 is also believed to distinguish Exhibit O, in that Exhibit O fails to teach or suggest at least “an authentication protocol for allowing the SP site to authenticate registered users in response to user-specific authentication requests from the SP sites, the authentication requests responsive to requests from the user computers to access the online services of the SP sites, the authentication protocol implemented by software components of the user computers, the SP sites, and the online broker site.”

CLAIM 64

Claim 64 provides a system further comprising a billing system for allowing the SP sites to charge the registered users for accesses to the online services by sending billing events to the online brokering service, the billing system including a centralized database for recording billing

events to accounts of the registered users. As discussed above, Exhibit O provides no enabling disclosure of a billing system, and is therefore distinguished.

CLAIM 66

Claim 66 provides a system further comprising an access rights database at the registration site, the access rights database storing access rights data for a plurality of the registered users, the access rights data specifying access rights of the plurality of registered users with respect to the SP sites, the access rights data provided to the SP sites by the registration site. Exhibit O provides no enabling disclosure of any access rights limitations (as distinct from an access limitation), and is therefore distinguished.

CLAIM 67

Claim 67 provides a system wherein the authentication protocol implements a challenge-response protocol. Exhibit O provides no enabling disclosure of a challenge-response protocol, and is therefore distinguished.

CLAIM 69

Claim 69 provides a method providing a fee-based online service from a Service Provider (SP) site to a user over a distributed network while concealing the payment and personal information of the user from the Service Provider. Exhibit O provides no enabling disclosure for providing a fee-based online service, and further provides no teaching or suggestion of concealment of payment and personal information, and is therefore distinguished.

In particular, Exhibit O fails to teach or suggest:

providing the fee-based online service from the SP site to the user computer over the distributed network only if the verification message indicates that the step of authenticating was successful;

generation a billing event at the SP site and sending the billing event to the online broker site, the billing event anonymously identifying the user to the online brokering service, the billing event including a charge for the providing of the online service to the user computer; and

updating an account of the user at the online broker site to reflect the charge included within the billing event.

Likewise, the verification protocol as set forth in the claim is not taught or suggested.

CLAIM 70

Claim 70 provides a method further comprising the step of providing an account statement from the online broker site to the user computer over at-least the distributed network, the account statement reflecting the charge included in the billing event. This is neither taught nor suggested by the reference.

CLAIM 71 AND 74

Claim 71 provides an online brokering service for allowing users of a public network to anonymously purchase online services from Service Provider (SP) sites on the public network, the online brokering service provided from an online broker site and a registration site that are each located separately and remotely from the SP sites. As discussed above, Exhibit O provides no enabling disclosure which permits any purchase. In particular, the following elements are absent: “a billing system at the online broker site for recording monetary charges to accounts of

registered users, the monetary charges corresponding to online services purchased from the SP sites over the public network; ... (b) receiving user-specific billing events from the SP sites and passing the billing events to the billing system to update the accounts of registered users, each billing event specifying at least (1) an anonymous ID of a registered user, and (2) a charge to be applied to the account of the registered user”.

CLAIM 72

Claim 72 provides a n online brokering service wherein at least one of the online broker software package and registration software package further performs the function of: retrieving user-specific customization data from the database in response to requests from the SP sites and transmitting the customization data to the SP sites, the customization data indicating user specified preferences for enabling the SP sites to provide user customized online services. This is neither taught nor suggested by the reference.

CLAIM 75 AND 76 AND 78

Claim 75 provides a virtual online services network for allowing users to directly access service provider (SP) sites over a public network, comprising:

- an online brokering service running on at least one site of a computer network, the online brokering service storing billing information for a plurality of users of the public network, the online brokering service providing online access by the users to account-specific billing information;

- a registration service running an at least one site of a computer network, and being separate from the online brokering service, the registration service storing account information

for a plurality of users of the public network, each of the users having a respective account with the online brokering service;

a plurality of fee-based online services running on a plurality of independent service provider (SP) sites on the public network, the SP sites directly accessible to the users over the public network, each SP site being registered with the online brokering service and the registration service, and being configured to use the registration service to authenticate the users when the users connect to the SP sites over the public network, the fee-based services configured to generate account-specific billing events in response to uses of the online services by the users and to forward the billing events to the online brokering service so that the users are billed for the online services from a centralized billing location; and

a log-on protocol which allows the users to access the plurality of online services using their respective accounts, the log-on protocol configured to (1) prompt a user for an account identifier, (2) cache the account identifier during the course of a user log-on session, and (3) use the cached account identifier to access multiple different SP sites, the log-on protocol thereby allowing the user to seamlessly access the plurality of fee-based online services following a single log-on event;

wherein the registration service stores user-specific access rights data, and provides the access rights data specifying access rights for a plurality of online services for a specific user to the SP sites in response to requests from the SP sites, and wherein the fee-based online services are configured to use the access rights data to automatically provide user-customized services to the users.

It is respectfully submitted that Exhibit O teaches none of the aforementioned elements, and is therefore distinguished on multiple bases.

CLAIM 77

Claim 77 provides a virtual online services network, wherein the log-on protocol includes a challenge-response authentication protocol for allowing the SP sites to authenticate the users. This protocol is neither taught nor suggested by the reference.

CLAIMS 79 AND 80

Claim 79 provides an apparatus comprising, inter alia:

the at least one registration data structure including registration data of a plurality of a plurality of registered customers, the at least one data structure further comprising access rights relating to a plurality of online services;

whereby the registration server facilitates seamless connection between a selected registered customer and an online site to create a virtual online service, including anonymously providing the selected customer's access rights to the plurality of online services provided by the selected online site, and

whereby the broker server receives anonymous accounting information from the online site for charges of a customer and receives identifying information from the registration server to permit updating of account information for a respective registered customer.

It is respectfully submitted that Exhibit O does not teach or suggest "access rights" nor customer charges.

CLAIM 81

Claim 81 provides a system, comprising:

- (a) a plurality of separate user registration databases, each storing a plurality of user

identifications, including user account reference information;

(b) a provider interface, through which a plurality of providers issue requests to post a transaction to a particular user account, without requiring knowledge of a respective user identity;

(c) a settlement server, receiving said requests, accessing at least one of said user registration databases, and communicating said request and an user identity to one of a plurality of user account databases; and

(d) said user registration databases and said user account databases being independent and remotely located with respect to each other.

Exhibit O does not teach posting a transaction to a particular user account without requiring knowledge of a respective user identity, or the settlement server. It likewise does not teach the separation of the registration and account databases.

CLAIM 82

Claim 82 provides a method, comprising:

(a) recording a user identification, including user account reference information, into one of a plurality of separately maintained user registration databases;

(b) issuing a request to post a transaction to a particular user account, without requiring knowledge of a respective user identity by a posting party;

(c) at a settlement server:

(i) receiving the request from the posting party,

(ii) accessing at least one of the user registration databases, and

(iii) communicating the request and an user identity to corresponding one of a

plurality of user account databases; and

(d) independently maintaining the user registration databases and the user account databases at remote locations.

Exhibit O does not teach posting a transaction to a particular user account without requiring knowledge of a respective user identity, or the settlement server. It likewise does not teach the independent registration and user account databases.

CLAIM 83

Claim 83 provides a system, wherein the token is valid for a restricted period of time. The reference does not teach or suggest this limitation.

CLAIM 84

Claim 84 provides a method wherein said verifying that the client has authenticated at his home provider, and determining that client's access privileges and criteria, is limited in validity for a restricted period of time. The reference does not teach or suggest this limitation.

CLAIM 85

Claim 85 provides a method wherein said verification message is limited in validity for a restricted period of time. The reference does not teach or suggest this limitation.

CLAIM 86

Claim 86 provides a method wherein said verifying step determines whether the authentication message has expired. The reference does not teach or suggest this limitation.

CLAIM 87

Claim 87 provides a system wherein the authentication protocol limits a validity of authentication of registered users for a restricted period of time. The reference does not teach or suggest this limitation.

CLAIM 88

Claim 88 provides a system wherein the verification message is valid for a restricted period of time. The reference does not teach or suggest this limitation.

2. Claims 9-10 and 26-27 are rejected under 35 U.S.C. § 103(a) as being obvious over Exhibit O in view of Exhibit L (“Questions Often Asked By Prospective Clickshare Publishers”, Newshare Release, Copyright 1995).

CLAIM 9

Claim 9 provides a system which includes an acceptance means by which a client's token is accepted by a service provider from whom the client wishes to receive services or goods across a data network, and is instantaneously submitted to the common service point, which, if the token's contents match that of a token in the common service point's dynamic session database, returns preference, pricing and service-class information about the requesting client, prior to the providing of the requested services or goods across a data network. This is neither taught nor suggested by Exhibit O. Exhibit L fails to remedy this deficiency. It is noted that Exhibit L, while bearing a Copyright date of 1995, is actually cached by archive.org on November 12, 1996. The Third Declaration of William P. Densmore Jr. October 3, 2005 does not dispute its purported date, in paragraph 24, but does note that this document is prophetic, as is Exhibit O, in that it speaks of the future capabilities of the system, without providing sufficient details regarding implementation to render it enabling or to remediate the fundamental deficiencies of Exhibit O. There is no evidence that this document was publicly released in 1995, and therefore it may not be a prior art reference.

CLAIM 10

Claim 10 provides a system according to claim 9 which utilizes the User Datagram Protocol (UDP) for implementing the acceptance means. This is neither taught nor suggested by the references. The use of UDP, especially in a transactional environment where packet delivery is required is not at all obvious, and the Examiner has provided no sufficient argument in favor

of this rejection.

CLAIM 26

Claim 26 provides a method which includes an acceptance step by which a client's token is accepted by a service provider from whom the client wishes to receive services or goods across a data network, and is instantaneously submitted to the common service point, which, if the token's contents match that of a token in the common service point's dynamic session database, returns preference, pricing and service-class information about the requesting client, prior to the providing of the requested services or goods across a data network. This is neither taught nor suggested by Exhibit O. Exhibit L fails to remedy this deficiency. It is noted that Exhibit L, while bearing a Copyright date of 1995, is actually cached by archive.org on November 12, 1996. The Third Declaration of William P. Densmore Jr. October 3, 2005 does not dispute its purported date, in paragraph 24, does note that this document is prophetic, as is Exhibit O, in that it speaks of the future capabilities of the system, without providing sufficient details regarding implementation to render it enabling or to remediate the fundamental deficiencies of Exhibit O. There is no evidence that this document was publicly released in 1995, and therefore it may not be prior art reference.

CLAIM 27

Claim 27 provides a method of claim 26 utilizing the User Datagram Protocol (UDP) to accomplish the acceptance step. This is neither taught nor suggested by the reference. The use of UDP, especially in a transactional environment where packet delivery is required is not at all obvious, and the Examiner has provided no sufficient argument in favor of this rejection.

3. Claims 36-62 are rejected under 35 U.S.C. § 103(a) as being obvious over Exhibit O in view of Teper (U.S. 5,815,665).

Claims 35-62 are rejected as being obvious over Exhibit “O” in view of Teper. The Examiner notes that the Declaration of Densmore was “previously found ineffective per the office action submitted on September 2, 2004”. It is noted, however, that additional declarations are of record, including a Declaration of David M. Oliver, William P. Densmore, Jr., and Michael J. Callahan”, dated August 12 2004 (specifically antedating Teper), was submitted with the response to the Office Action dated December 2, 2004, and the “Third Declaration of William P. Densmore Jr.” dated October 3, 2005 (which does not directly address Teper, but does authenticate certain press releases which themselves demonstrate that the present invention antedated Teper), and therefore that it appears that less than all of the evidence available was considered when the Examiner formulated his conclusion that applicants’ evidence was insufficient to overcome the reference. Exhibit O is distinguished as discussed herein

CLAIM 37

Claim 37 provides a method wherein the step of generating the response message further comprises applying a cryptographic algorithm to at least the challenge message such that the resulting response message depends upon both the challenge message and the password. This is neither taught nor suggested by the reference.

CLAIM 38

Claim 38 provides a method wherein the step of obtaining the password of the user

comprises retrieving the password from a password cache on the user computer, the password cache temporarily storing the password following manual entry by the user, the method thereby enabling the user to access multiple SP sites without re-entering the password. This is neither taught nor suggested by the reference.

CLAIM 39

Claim 39 provides a method further comprising the steps of:

assigning an anonymous identifier to the user at the online broker site and sending the anonymous identifier to the SP site to enable the SP site to anonymously charge the user for an online service; and

generating a billing event at the SP site and sending the billing event to the settlor site, the billing event specifying at least (1) the anonymous identifier of the user, and (2) a monetary charge to be applied to an account of the user.

This is neither taught nor suggested by the reference.

CLAIM 40

Claim 40 provides a method further comprising the steps of:

establishing a connection between the user computer and the settlor site; and

providing an online billing statement to the user over the connection, the online billing statement reflecting the monetary charge specified in the billing event.

This is neither taught nor suggested by the reference.

CLAIM 41

Claim 41 provides a method further comprising the step of sending a billing statement from the settlor site to the user computer over the public network, the billing statement reflecting the monetary charge specified in the billing event. This is neither taught nor suggested by the reference.

CLAIM 42

Claim 42 provides a method further comprising the steps of:

sending an access rights update request from the SP site to the remote online broker site, the access rights update request specifying an update to be made by the online brokering service to the access rights of the user; and

processing the access rights update request at the online broker site by updating the access rights data of the user stored within the brokering database.

This is neither taught nor suggested by the reference.

CLAIM 43

Claim 43 provides a method further comprising the steps of:

retrieving user-specific preference data of the user from the brokering database and sending the preference data from the online broker site to the SP site, the preference data indicating at least one user-specified preference for the customization of online services; and

adjusting the online service provided from the SP site according to the user-specified preference.

This is neither taught nor suggested by the reference.

CLAIM 44

Claim 44 provides a method wherein the preference data includes a connection speed at which the user computer connects to the public network, and wherein the step of adjusting comprises providing the service to the user computer at a speed which is commensurate with the connection speed. This is neither taught nor suggested by the reference.

CLAIM 45

Claim 45 provides a method wherein the preference data includes a display preference for the display of a particular type of media. This is neither taught nor suggested by the reference.

CLAIM 46

Claim 46 provides a method further comprising the steps of: generating a first session key at the user computer;

generating a second session key at the online broker site and sending the second session key to the SP site, the second session key corresponding to the first session key; and

using the first and second session keys to encrypt and decrypt message traffic between the user computer and the SP site as the online service is provided to the user computer.

This is neither taught nor suggested by the reference.

CLAIM 48

Claim 48 provides a method wherein the steps of passing the request, challenge and response messages over the public network respectively comprise passing the request, challenge and response messages over a private network. This is neither taught nor suggested by the

reference.

CLAIMS 49 AND 60 AND 61 AND 62

Claim 49 provides a method providing a fee-based online service from a Service Provider (SP) site to a user over a public network while concealing the payment and personal information of the user from the Service Provider. Exhibit O does not address payment information at all, and is thus distinguished. In particular, the reference fails to teach or suggest at least:

- generating an encrypted authentication message at the user computer and sending the authentication message to the registration site via at least the public network;

- verifying the authentication message at the registration site to thereby authenticate the user, the step of verifying comprising accessing the account information of the user stored in the registration database;

- generating an anonymous ID at the registration site and sending the anonymous ID to the SP site to allow the SP site to impose a charge the user for the online service; ...

- generating a billing event at the SP site and sending the billing event to the online broker site, the billing event specifying at least (1) the anonymous ID, and (2) a monetary charge to be applied to an account of the user in the brokering database.

As discussed above, Exhibit O merely presents prophetic, non-enabling discussion of a future transaction handling capability.

CLAIM 50

Claim 50 provides a method wherein the step of generating an encrypted authentication

message comprises the steps of prompting the user for a password and using the password to generate the authentication message, the password stored in the registration database to permit determination whether the authentication message corresponds to the password. This is neither taught nor suggested by the reference.

CLAIM 51

Claim 51 provides a method wherein the step of sending the encrypted authentication message to the online broker site comprises the steps of:

sending the authentication message from the user computer to the SP site over the public network; and

sending the authentication message from the SP site to the registration site.

This is neither taught nor suggested by the reference.

CLAIM 52

Claim 52 provides a method further comprising the step of processing the billing event at the online broker site to thereby apply the charge to the account of the user. This is neither taught nor suggested by the reference.

CLAIM 53

Claim 53 provides a method further comprising the step of providing an account statement from the online broker site to the user computer over at-least the public network, the account statement reflecting the charge specified in the billing event.

CLAIM 54

Claim 54 provides a method further comprising the steps of:

retrieving access rights data of the user from the brokering database, the access rights data specifying the access rights of the user with respect to the online service and/or the SP site;
and

sending the access rights data from the online registration site to the SP site.

This is neither taught nor suggested by the reference.

CLAIM 55

Claim 55 provides a method further comprising the step of interpreting the access rights data at the SP site to determine whether the user is authorized to access a particular content item of the SP site. This is neither taught nor suggested by the reference.

CLAIM 56

Claim 56 provides a method further comprising the step of sending an access rights update request from the SP site to the registration site, the access rights update request specifying at least (1) the anonymous ID of the user, and (2) an update to be made to the access rights data of the user. This is neither taught nor suggested by the reference.

CLAIM 57

Claim 57 provides a method further comprising the steps of:

retrieving user-specific customization data of the user from the brokering database and
sending the customization data from the online broker site to the SP site, the customization data

indicating a user-specified preference for the customization of the online service; and
adjusting the online service provided from the SP site according to the user-specified preference.

This is neither taught nor suggested by the reference.

CLAIM 58

Claim 58 provides a method wherein the customization data includes at least one of a display preference for the display of a particular type of media and a connection speed at which the user computer connects to the public network, and wherein the step of adjusting comprises providing the service to the user computer at a speed which generally corresponds to the connection speed. This is neither taught nor suggested by the reference.

CLAIM 59

Claim 59 provides a method further comprising the steps of:
generating a first session key at the user computer;
generating a second session key at the registration site and sending the second session key to the SP site, the second session key corresponding to the first session key; and
using the first and second session keys to encrypt and decrypt message traffic between the user computer and the SP site as the online service is provided to the user computer.

This is neither taught nor suggested by the reference.

4. Claims 65 and 73 are rejected under 35 U.S.C. § 103(a) as being obvious over Exhibit O in view of Teper (U.S. 5,815,665) as applied to claims 64 and 71, and further in view of Exhibit L.

It is noted that Exhibit L, while bearing a Copyright date of 1995, is actually cached by archive.org on November 12, 1996. The Third Declaration of William P. Densmore Jr. October 3, 2005 does not dispute its purported date, in paragraph 24, but does note that this document is prophetic, as is Exhibit O, in that it speaks of the future capabilities of the system, without providing sufficient details regarding implementation to render it enabling or to remediate the fundamental deficiencies of Exhibit O. There is no evidence that this document was publicly released in 1995, and therefore it may not be a prior art reference.

The Examiner notes that the Declaration of Densmore was “previously found ineffective per the office action submitted on September 2, 2004”. It is noted, however, that additional declarations are of record, including a Declaration of David M. Oliver, William P. Densmore, Jr., and Michael J. Callahan”, dated August 12 2004 (specifically antedating Teper), was submitted with the response to the Office Action dated December 2, 2004, and the “Third Declaration of William P. Densmore Jr.” dated October 3, 2005 (which does not directly address Teper, but does authenticate certain press releases which themselves demonstrate that the present invention antedated Teper), and therefore that it appears that less than all of the evidence available was considered when the Examiner formulated his conclusion that applicants’ evidence was insufficient to overcome the reference. Exhibit O is distinguished as discussed herein

CLAIM 65

Claim 65 provides a system wherein the billing system includes a billing viewer application running on the user computers, the billing viewer application allowing a registered user to view a personal billing statement stored in the online broker database, the billing statement including charges from multiple different SP sites of the plurality of SP sites. As discussed above, Exhibit O provides no enabling disclosure of a billing system, and is therefore distinguished.

CLAIM 73

Claim 73 provides an online brokering service, wherein the billing system comprises a software module for allowing the registered user to remotely access an online billing statement, the online billing statement reflecting billing events received by the online broker site from multiple different SP sites. This is neither taught nor suggested by the reference.

It is therefore respectfully submitted that the invention, as claimed, is patentable.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Steven M. Hoffberg", with a stylized, flowing script.

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(viii) Claims appendix. An appendix containing a copy of the claims involved in the appeal.

1. A system for managing client accounts and controlling access to resources over data networks, said system comprising:

(a) a mechanism for sharing client information and charges among a plurality of service providers;

(b) a client registration database maintained by one of the service providers (its "home provider") and includes information which selectively authorizes access to the resources of the other service providers ("outside providers"), each service provider maintaining an independent database of its respective clients;

(c) a settling means, separate from a respective home provider, for settling accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers, the settling means accessing a respective home provider registration database, and communicating with an accounting database maintained separately from a respective registration database;

(d) a payment means adapted to assure that the outside providers are then paid for that access;

(e) a sharing means adapted to allow the service providers to share users without requiring an open account for each user at each service provider; and

(f) a verification means including a token and an authentication server adapted to allow each service provider to determine if a particular client is registered by a home provider, verify that the client has authenticated at his home provider, and determine that client's access privileges and criteria.

2. A system as recited in claim 1 including means by which an owner of goods sells access to those goods across a data network such that the owner may instantaneously and simultaneously display across the network multiple differing prices of the same good or classes of goods.

3. A system as recited in claim 1, including means by which a service provider instantaneously configures the form and substance of services or goods across a data network provided to different or unique clients in response to data accompanying the client's request for service.

4. A system as recited in claim 1, including means by which a service provider instantaneously determines whether or what type or form of service or goods across a data network to provide to different or unique clients based upon data about the client provided along with the client's request for service.

5. A system as recited in Claim 1, including means by which multiple service providers aggregate, transfer and share data about the clients, in a standardized form which identifies each client by a unique alpha-numeric sequence, but where the personal identifying attributes of the client need be known only to the home provider.

6. A system as recited in Claim 1, including means by which a service providers request access to, review of, or purchase of resources or goods across a data network of clients

on the basis of specific attributes of the client which the client elects to provide at the moment when service is requested, where such attributes are technically capable of being an integral and automatic part of the request form.

7. A system as recited in Claim 1, including means by which a home provider provides a client's preference, pricing and service-class information to a common service point in exchange for an authenticatable token, which the home provider then provides to its client, so that the client may in turn offer the token to multiple outside providers whose services or goods across a data network the client wishes to access, review or purchase.

8. A system as recited in Claim 7, which employs the Internet's Hyper-Text Transfer Protocol (HTTP), and has appending means adapted to appending to or include in the user computer a Uniform Resource Locator (URL), or in a Request/Response Header, a sequence of alpha-numeric characters which includes said authenticatable token.

9. A system as recited in Claim 7, which includes an acceptance means by which a client's token is accepted by a service provider from whom the client wishes to receive services or goods across a data network, and is instantaneously submitted to the common service point, which, if the token's contents match that of a token in the common service point's dynamic session database, returns preference, pricing and service-class information about the requesting client, prior to the providing of the requested services or goods across a data network.

10. A system as recited in Claim 9, of utilizing the User Datagram Protocol (UDP) for

implementing the acceptance means.

11. A system as recited in Claim 1, for collecting and storing at a common service point discrete records of access by clients to resources or goods across a data network of multiple service providers, where such collection is capable of occurring instantaneously subsequent to the providing of each resource or good.

12. A system as recited in Claim 11, including means by which discrete records are instantaneously sorted and stored in databases according to the identity of the home provider.

13. A system as recited in Claim 1, including means for collecting and aggregating records of financial charges for access to, review or acquisition of services or goods across a data network such that the records may be supplied to the suppliers of client servers without knowledge of or reference to the ultimate form of payment by the client.

14. A system as recited in Claim 1, in which said token is only "read" by said authentication server, thus permitting the token to be private-key encrypted.

15. A system as recited in Claim 1, wherein which said client comprises an end user and has an end user's account and an end user's account manager, for enabling an initiating Internet World Wide Web host to present in HyperText Markup Language (HTML) "hypertext links" which address services or goods available from multiple other receiving World Wide Web sites such that when the end user highlights or clicks the link a process is initiated whereby the

receiving site is able to bill the end user's account manager for access to, review or acquisition of the services or goods, without regard to whether the end user's account is maintained by the initiating WWW host or by some other service provider.

16. A system as recited in Claim 1, which includes a sequence means adapted for obtaining, transferring and maintaining among multiple service providers a unique alphanumeric sequence associated with a specific digital information resource or object for a purpose; where the topological location of the resource on the network may not necessarily be related or relevant to the location where, or time when, the resource was originally created.

17. A system as recited in Claim 1, which includes a sequence means adapted for obtaining, transferring and maintaining among multiple service providers a dynamically updated record of funds encumbered by a network user for the purchase of a digital information resource or resources, such that each subsequent record of purchase in time, and the transfer to clients of an updated record of funds available or authorized to be encumbered, is accomplished.

18. A method for managing client accounts and controlling access to resources over data networks, said method comprising:

- (a) sharing client information and charges among a plurality of service providers;
- (b) registering a client with one of the service providers (the "home provider") in a registration database, and allowing the client to access the resources of the other service providers ("outside providers"), each service provider maintaining an independent registration database of its clients;

(c) settling accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers, by accessing a respective home provider registration database, and communicating with an accounting database maintained separately from a respective registration database;

(d) assuring that the outside providers are paid for access by of a home provider for a client's access to the outside provider's resources;

(e) allowing the providers to share users without requiring an open account for each user at each service provider; and

(f) allowing each provider to determine if a particular client is registered, verifying that the client has authenticated at his home provider, and determining that client's access privileges and criteria.

19. A method as recited in claim 18 by which the owner of goods sells access to those goods across a data network such that the owner may instantaneously and simultaneously display across the network multiple differing prices of the same good or classes of goods.

20. A method as recited in claim 18, by which a service provider instantaneously configures the form and substance of services or goods across a data network provided to different or unique clients in response to data about the client accompanying the client's request for service.

21. A method as recited in claim 18, by which a service provider instantaneously determines whether or what type or form of service or goods across a data network to provide to

different or unique clients based upon data about the client accompanying the client's request for service.

22. A method as recited in Claim 18, by which multiple service providers aggregate, transfer and share data about the clients, in a standardized form which identifies each client by a unique alpha-numeric sequence, but where the personal identifying attributes of the client need be known only to the home provider.

23. A method as recited in Claim 18, in which a service provider requests access to, review of, or purchase of resources or goods across a data network on the basis of specific attributes of the client which the client elects to provide at the moment when service is requested, where such attributes are technically capable of being an integral and automatic part of the request form.

24. A method as recited in Claim 18, in which a home provider provides a client's preference, pricing and service-class information to a common service point in exchange for an authenticatable token, which the home provider then provides to its client, so that the client may in turn offer the token to multiple outside providers whose services or goods across a data network the client wishes to access, review or purchase.

25. A method as recited in claim 24, employing the Internet's Hyper-Text Transfer Protocol (HTTP), of appending to or including in a Uniform Resource Locator (URL), or in a Request/Response Header, a sequence of alpha-numeric characters which includes said

authenticatable token.

26. A method as recited in claim 24, which includes an acceptance step by which a client's token is accepted by a service provider from whom the client wishes to receive services or goods across a data network, and is instantaneously submitted to the common service point, which, if the token's contents match that of a token in the common service point's dynamic session database, returns preference, pricing and service-class information about the requesting client, prior to the providing of the requested services or goods across a data network.

27. A method as recited in claim 26, of utilizing the User Datagram Protocol (UDP) to accomplish the acceptance step.

28. A method as recited in claim 18, for collecting and storing at a common service point discrete records of access by clients to resources or goods across a data network of multiple service providers, where such collection is capable of occurring instantaneously subsequent to the providing of each resource or good.

29. A method as recited in claim 28, by which discrete records are instantaneously sorted and stored in databases according to the identity of the service provider of the individual client whose activity resulted in the record being produced.

30. A method as recited in Claim 18, for collecting and aggregating records of financial charges for access to, review or acquisition of services or goods across a data network

such that the records may be supplied to the suppliers of client services without knowledge of or reference to the ultimate form of payment by the client.

31. A method as recited in Claim 18, in which said token is only "read" by said authentication server, thus permitting the token to be private-key encrypted.

32. A method as recited in claim 18, wherein which said client comprises an end user and has an end user's account and an end user's account manager, for enabling an initiating Internet World Wide Web host to present in HyperText Markup Language (HTML) "hypertext links" which address services or goods available from multiple other receiving World Wide Web sites such that when the end user highlights or clicks the link a process is initiated whereby the receiving site is able to bill the end user's account manager for access to, review or acquisition of the services or goods, without regard to whether the end user's account is maintained by the initiating WWW host or by some other service provider.

33. A method as recited in claim 18, including the step of obtaining, transferring and maintaining among multiple service providers a unique alpha-numeric sequence associated with a specific digital information resource or object for a purpose; where the topological location of the resource on the network may not necessarily be related or relevant to the location where, or time when, the resource was originally created.

34. A method as recited in Claim 18 which includes sequence steps for obtaining, transferring and maintaining among multiple service providers a dynamically updated record of

funds encumbered by a client for the purchase of a digital information resource or resources such that each subsequent record of purchase in time, and the transfer to clients of an updated record of funds available or authorized to be encumbered, is accomplished.

35. A method of providing an online service to a user over a public network, the online service provided by a Service Provider (SP) site to a user computer via the public network, the method comprising the steps of:

- sending a request message from the user computer to the SP site over the public network to request the use of the online service;

- generating a challenge message at the SP site in response to the request message and sending the challenge message over the public network to the user computer;

- generating a response message in the user computer in response to the challenge message and sending the response message over the public network to the SP site, the response message including or being based upon an identifier of the user;

- sending at least the response message from the SP site to a remote online broker site, the online broker site having a brokering database which contains account information of registered users of an online brokering service of the online broker site;

- processing the response message at the remote online broker site to determine whether the response message is authentic, the step of processing comprising accessing the account information in the brokering database;

- sending a verification message from the remote online broker site to the SP site, the verification message indicating whether the response message is authentic;

- retrieving access rights data of the user from the brokering database if the response

message is authentic, the access rights data specifies a plurality of content categories to which the user has access, the plurality of content categories corresponding to a plurality of different online services offered by the SP site;

sending the access rights data from the online broker site to the SP site;

providing the online service from the SP site to the user computer over the public network if the verification message indicates that the response message is authentic;

denying access by the user to the online service if the verification message indicates that the response message is not authentic; and

updating a settling database at a settlor site, with a charge related to the user computer access to the SP site, the settlor site being maintained separately from the remote online broker site.

36. A method as in claim 35, wherein the step of generating a response message comprises obtaining a password of the user.

37. A method as in claim 36, wherein the step of generating the response message further comprises applying a cryptographic algorithm to at least the challenge message such that the resulting response message depends upon both the challenge message and the password.

38. A method as in claim 36, wherein the step of obtaining the password of the user comprises retrieving the password from a password cache on the user computer, the password cache temporarily storing the password following manual entry by the user, the method thereby enabling the user to access multiple SP sites without re-entering the password.

39. A method as in claim 35, further comprising the steps of:

assigning an anonymous identifier to the user at the online broker site and sending the anonymous identifier to the SP site to enable the SP site to anonymously charge the user for an online service; and

generating a billing event at the SP site and sending the billing event to the settlor site, the billing event specifying at least (1) the anonymous identifier of the user, and (2) a monetary charge to be applied to an account of the user.

40. A method as in claim 35, further comprising the steps of:

establishing a connection between the user computer and the settlor site; and

providing an online billing statement to the user over the connection, the online billing statement reflecting the monetary charge specified in the billing event.

41. A method as in claim 35, further comprising the step of sending a billing

statement from the settlor site to the user computer over the public network, the billing statement reflecting the monetary charge specified in the billing event.

42. A method as in claim 35, further comprising the steps of:

sending an access rights update request from the SP site to the remote online broker site, the access rights update request specifying an update to be made by the online brokering service to the access rights of the user; and

processing the access rights update request at the online broker site by updating the

access rights data of the user stored within the brokering database.

43. A method as in claim 35, further comprising the steps of:

retrieving user-specific preference data of the user from the brokering database and sending the preference data from the online broker site to the SP site, the preference data indicating at least one user-specified preference for the customization of online services; and adjusting the online service provided from the SP site according to the user-specified preference.

44. A method as in claim 43, wherein the preference data includes a connection speed at which the user computer connects to the public network, and wherein the step of adjusting comprises providing the service to the user computer at a speed which is commensurate with the connection speed.

45. A method as in claim 43, wherein the preference data includes a display preference for the display of a particular type of media.

46. A method as in claim 35, further comprising the steps of: generating a first session key at the user computer;
generating a second session key at the online broker site and sending the second session key to the SP site, the second session key corresponding to the first session key; and
using the first and second session keys to encrypt and decrypt message traffic between the user computer and the SP site as the online service is provided to the user computer.

47. A method as in claim 35, wherein the public network comprises the Internet.

48. A method as in claim 35, wherein the steps of passing the request, challenge and response messages over the public network respectively comprise passing the request, challenge and response messages over a private network.

49. A method providing a fee-based online service from a Service Provider (SP) site to a user over a public network while concealing the payment and personal information of the user from the Service Provider, comprising the steps of:

registering a user at a registration site that provides a registration service, the registration site having a registration database which contains registration information on the user and on other users of the online service, the registration site being located remotely from the SP site;

providing an online broker site that provides an online brokering service, the online broker site having a brokering database which contains account information on the user and on other users of the online brokering service, the online broker site being located remotely from the SP site and the registration site;

establishing a connection between a computer of the user ("user computer") and the SP site over at least the public network;

generating an encrypted authentication message at the user computer and sending the authentication message to the registration site via at least the public network;

verifying the authentication message at the registration site to thereby authenticate the user, the step of verifying comprising accessing the account information of the user stored in the

registration database;

generating an anonymous ID at the registration site and sending the anonymous ID to the SP site to allow the SP site to impose a charge the user for the online service;

providing the online service from the SP site to the user computer over the public network;

generating a billing event at the SP site and sending the billing event to the online broker site, the billing event specifying at least (1) the anonymous ID, and (2) a monetary charge to be applied to an account of the user in the brokering database.

50. A method as in claim 49, wherein the step of generating an encrypted authentication message comprises the steps of prompting the user for a password and using the password to generate the authentication message, the password stored in the registration database to permit determination whether the authentication message corresponds to the password.

51. A method as in claim 49, wherein the step of sending the encrypted authentication message to the online broker site comprises the steps of:

sending the authentication message from the user computer to the SP site over the public network; and

sending the authentication message from the SP site to the registration site.

52. A method as in claim 49, further comprising the step of processing the billing event at the online broker site to thereby apply the charge to the account of the user.

53. A method as in claim 52, further comprising the step of providing an account statement from the online broker site to the user computer over at-least the public network, the account statement reflecting the charge specified in the billing event.

54. A method as in claim 49, further comprising the steps of:
retrieving access rights data of the user from the brokering database, the access rights data specifying the access rights of the user with respect to the online service and/or the SP site;
and
sending the access rights data from the online registration site to the SP site.

55. A method as in claim 54, further comprising the step of interpreting the access rights data at the SP site to determine whether the user is authorized to access a particular content item of the SP site.

56. A method as in claim 54, further comprising the step of sending an access rights update request from the SP site to the registration site, the access rights update request specifying at least (1) the anonymous ID of the user, and (2) an update to be made to the access rights data of the user.

57. A method as in claim 49, further comprising the steps of:
retrieving user-specific customization data of the user from the brokering database and
sending the customization data from the online broker site to the SP site, the customization data indicating a user-specified preference for the customization of the online service; and

adjusting the online service provided from the SP site according to the user-specified preference.

58. A method as in claim 57, wherein the customization data includes at least one of a display preference for the display of a particular type of media and a connection speed at which the user computer connects to the public network, and wherein the step of adjusting comprises providing the service to the user computer at a speed which generally corresponds to the connection speed.

59. A method as in claim 49, further comprising the steps of:
generating a first session key at the user computer;
generating a second session key at the registration site and sending the second session key to the SP site, the second session key corresponding to the first session key; and
using the first and second session keys to encrypt and decrypt message traffic between the user computer and the SP site as the online service is provided to the user computer.

60. A method as in claim 49, wherein the public network comprises the Internet.

61. A method as in claim 49, wherein the online service comprises a software download service.

62. A method as in claim 49, wherein the online service comprises user access to media content.

63. A system for allowing users to securely access online service providers over an untrusted distributed network, comprising:

a plurality of Service Provider (SP) sites connected to the distributed network, each SP site running at least one service application to provide an online service to users over the distributed network;

a plurality of user computers connected to the distributed network, each user computer running at least one client application for accessing online services of the SP sites;

an online broker site connected to the plurality of SP sites, the online broker site running at least one brokering application to provide an online brokering service to account for use of the online services by respective users, the SP sites optionally including a user database containing user-specific authentication information of users that have registered with an SP site, the registered users accessing the SP sites from the users computers over the distributed network; and

an authentication protocol for allowing the SP site to authenticate registered users in response to user-specific authentication requests from the SP sites, the authentication requests responsive to requests from the user computers to access the online services of the SP sites, the authentication protocol implemented by software components of the user computers, the SP sites, and the online broker site.

64. A system as in claim 63, further comprising a billing system for allowing the SP sites to charge the registered users for accesses to the online services by sending billing events to the online brokering service, the billing system including a centralized database for recording

billing events to accounts of the registered users.

65. A system as in claim 64, wherein the billing system includes a billing viewer application running on the user computers, the billing viewer application allowing a registered user to view a personal billing statement stored in the online broker database, the billing statement including charges from multiple different SP sites of the plurality of SP sites.

66. A system as in claim 63, further comprising an access rights database at the registration site, the access rights database storing access rights data for a plurality of the registered users, the access rights data specifying access rights of the plurality of registered users with respect to the SP sites, the access rights data provided to the SP sites by the registration site.

67. A system as in claim 63, wherein the authentication protocol implements a challenge-response protocol.

68. A system as in claim 63, wherein the distributed network comprises the Internet.

69. A method providing a fee-based online service from a Service Provider (SP) site to a user over a distributed network while concealing the payment and personal information of the user from the Service Provider, comprising the steps of:

providing a registration site that provides a registration service, the registration site having a registration database which contains registration information on the user and on other users of the online service, the registration site being located remotely from the SP site;

providing an online broker site that provides an online brokering service, the online broker site having a brokering database which contains account information on the user and on other users of the online brokering service, the online broker site located remotely from the SP site and the registration site;

sending an access request from a computer of the user ("user computer") over the distributed network to the SP site;

sending an authentication request from the SP site to the registration site in response to the access request;

prompting the user for a user identifier at the user computer and sending the user identifier to the registration site;

authenticating the user at the registration site in response to the authentication request, the step of authenticating comprising using the user identifier sent from the user computer to access the account information stored within the registration database;

sending a verification message from the registration site to the SP site in response to the authentication request, the verification message indicating whether the step of authenticating was successful;

retrieving access rights data of the user from the registration database if the step of authenticating is successful, the access rights data specifying a plurality of access rights of the user with respect to the online service and/or the SP site;

sending the plurality of access rights data from the registration site to the SP site to anonymously inform the SP site of the access rights of the user;

providing the fee-based online service from the SP site to the user computer over the distributed network only if the verification message indicates that the step of authenticating was

successful;

generation a billing event at the SP site and sending the billing event to the online broker site, the billing event anonymously identifying the user to the online brokering service, the billing event including a charge for the providing of the online service to the user computer; and updating an account of the user at the online broker site to reflect the charge included within the billing event.

70. A method as in claim 69, further comprising the step of providing an account statement from the online broker site to the user computer over at-least the distributed network, the account statement reflecting the charge included in the billing event.

71. An online brokering service for allowing users of a public network to anonymously purchase online services from Service Provider (SP) sites on the public network, the online brokering service provided from an online broker site and a registration site that are each located separately and remotely from the SP sites, the online brokering service comprising:

- a database at the registration site which contains account information of users that have registered with online brokering service, the account information including at least a unique identifier of each registered user;
- a billing system at the online broker site for recording monetary charges to accounts of registered users, the monetary charges corresponding to online services purchased from the SP sites over the public network;
- a software package running at the online broker site, the brokerage software package performing at least the following functions:

(a) receiving identifying information about the user generated at the registration site to correlate an anonymous ID of a registered user with an identification of an account of a registered user;

(b) receiving user-specific billing events from the SP sites and passing the billing events to the billing system to update the accounts of registered users, each billing event specifying at least (1) an anonymous ID of a registered user, and (2) a charge to be applied to the account of the registered user; and

a software package running at the registration site, the registration software package performing at least the following functions:

(a) authenticating registered users in response to authentication requests received from the SP sites, the authentication requests generated in response to attempts by registered users to access online services of the SP sites, said authenticating comprising accessing the database to verify user account information;

(b) retrieving user-specific access rights data from the database in response to requests from the SP sites and transmitting the access rights data to the SP sites, the access rights data specifying a plurality of content categories or services to which a registered user has access and enabling the SP sites to provide customized access rights to the registered users; and

(c) generating an anonymous ID of a registered user for use by the SP sites and communicating the identifying information for correlating the anonymous ID with an identification of an account of a registered user to the online brokerage site.

72. An online brokering service as in claim 71, wherein at least one of the online broker software package and registration software package further performs the function of:

retrieving user-specific customization data from the database in response to requests from the SP sites and transmitting the customization data to the SP sites, the customization data indicating user specified preferences for enabling the SP sites to provide user customized online services.

73. An online brokering service as in claim 71, wherein the billing system comprises a software module for allowing the registered user to remotely access an online billing statement, the online billing statement reflecting billing events received by the online broker site from multiple different SP sites.

74. An online brokering service as in claim 71, wherein the public network comprises the Internet.

75. A virtual online services network for allowing users to directly access service provider (SP) sites over a public network, comprising:

an online brokering service running on at least one site of a computer network, the online brokering service storing billing information for a plurality of users of the public network, the online brokering service providing online access by the users to account-specific billing information;

a registration service running on at least one site of a computer network, and being separate from the online brokering service, the registration service storing account information for a plurality of users of the public network, each of the users having a respective account with the online brokering service;

a plurality of fee-based online services running on a plurality of independent service provider (SP) sites on the public network, the SP sites directly accessible to the users over the public network, each SP site being registered with the online brokering service and the registration service, and being configured to use the registration service to authenticate the users when the users connect to the SP sites over the public network, the fee-based services configured to generate account-specific billing events in response to uses of the online services by the users and to forward the billing events to the online brokering service so that the users are billed for the online services from a centralized billing location; and

a log-on protocol which allows the users to access the plurality of online services using their respective accounts, the log-on protocol configured to (1) prompt a user for an account identifier, (2) cache the account identifier during the course of a user log-on session, and (3) use the cached account identifier to access multiple different SP sites, the log-on protocol thereby allowing the user to seamlessly access the plurality of fee-based online services following a single log-on event;

wherein the registration service stores user-specific access rights data, and provides the access rights data specifying access rights for a plurality of online services for a specific user to the SP sites in response to requests from the SP sites, and wherein the fee-based online services are configured to use the access rights data to automatically provide user-customized services to the users.

76. A virtual online services network as in claim 75, wherein the log-on protocol is implemented by respective software components stored on (1) the SP sites, (2) the at least one site of the registration service, and (3) computers of the users.

77. A virtual online services network as in claim 75, wherein the log-on protocol includes a challenge-response authentication protocol for allowing the SP sites to authenticate the users.

78. A virtual online services network as in claim 75, wherein the public network comprises the Internet.

79. An apparatus comprising:

- a broker server operatively connected to a computer network, the broker server having a processor and a computer readable memory, the memory storing broker server implementation software, including customer access software, and at least one broker data structure;
- a registration server operatively connected to a computer network, maintained separately from the broker server, the registration server having a processor and a computer readable memory, the memory storing registration server implementation software, including customer access software, and at least one registration data structure;
- the at least one broker data structure including a list ID and account information for a plurality of registered customers;
- the at least one registration data structure including registration data of a plurality of a plurality of registered customers, the at least one data structure further comprising access rights relating to a plurality of online services;
- whereby the registration server facilitates seamless connection between a selected registered customer and an online site to create a virtual online service, including anonymously

providing the selected customer's access rights to the plurality of online services provided by the selected online site, and

whereby the broker server receives anonymous accounting information from the online site for charges of a customer and receives identifying information from the registration server to permit updating of account information for a respective registered customer.

80. An apparatus as in claim 79, wherein the computer network is a public network which comprises the Internet, and wherein the online sites are World Wide Web sites of the Internet.

81. A system, comprising:

(a) a plurality of separate user registration databases, each storing a plurality of user identifications, including user account reference information;

(b) a provider interface, through which a plurality of providers issue requests to post a transaction to a particular user account, without requiring knowledge of a respective user identity;

(c) a settlement server, receiving said requests, accessing at least one of said user registration databases, and communicating said request and an user identity to one of a plurality of user account databases; and

(d) said user registration databases and said user account databases being independent and remotely located with respect to each other.

82. A method, comprising:

- (a) recording a user identification, including user account reference information, into one of a plurality of separately maintained user registration databases;
- (b) issuing a request to post a transaction to a particular user account, without requiring knowledge of a respective user identity by a posting party;
- (c) at a settlement server:
 - (i) receiving the request from the posting party,
 - (ii) accessing at least one of the user registration databases, and
 - (iii) communicating the request and an user identity to corresponding one of a plurality of user account databases; and
- (d) independently maintaining the user registration databases and the user account databases at remote locations.

83. The system according to claim 1, wherein the token is valid for a restricted period of time.

84. The method according to claim 18, wherein said verifying that the client has authenticated at his home provider, and determining that client's access privileges and criteria, is limited in validity for a restricted period of time.

85. The method according to claim 35, wherein said verification message is limited in validity for a restricted period of time.

86. The method according to claim 49, wherein said verifying step determines

whether the authentication message has expired.

87. The system according to claim 63, wherein the authentication protocol limits a validity of authentication of registered users for a restricted period of time.

88. The system according to claim 69, wherein the verification message is valid for a restricted period of time.

(ix) Evidence appendix.

Attached hereto are copies of the various Declarations and evidence submitted during prosecution of the application. These are derived directly from the U.S.P.T.O. PAIR system (IFW), and were submitted prior to Final action, and therefore are all properly entered into the record.

(x) Related proceedings appendix.

Not Applicable. No decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 C.F.R. 41.37 are believed to exist.



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Oliver, et al.

Serial No.: 09/036,236

Filed: March 6, 1998

For: SYSTEM FOR MANAGEMENT OF TRANSACTIONS ON
NETWORKS

Examiner: Jeffrey A. Smith

Art Unit: 3625

March 6, 2006

Hon/ Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

RESPONSE TO REQUEST FOR INFORMATION UNDER 37 C.F.R. § 1.105

In response to the Request for Information dated January 6, 2006, the time for response to which expires March 6, 2006, applicant and assignee respond as follows:

REMARKS

Applicant and Assignee have reviewed the Request for Information, and their own records, and believe the following represents a complete response, after due investigation.

Some resources were created for distribution on the Internet, and their permanent embodiment is on the Internet. Paper records, if they exist, are therefore not primary, and these sources have been printed from their electronic source for this response.

EXAMINER'S REQUEST:

- (a) The "detailed description of how Clickshare (SM) works" referenced in Exhibit E.

Exhibit E is a digital download of a Sept. 15, 1995 news story written by M2 COMMUNICATIONS, and apparently located by the Examiner via an archival online information provider search. This is an obscure source, but a word-by-word comparison suggests it was rewritten or copied from a Sept. 8, 1995 "news release" sent by Newshare Corp. to the Newshare "interest" distribution email list, which included news organizations. Accordingly a digital copy of that news release is submitted in response to this request and is attached hereto as Attachment A.

The detailed description would appear to refer to "a detailed description of how Clickshare (SM) works is available by autoreply to Clickshare@clickshare.com." Newshare's circa-1995 server which handed email is no longer operational. An examination of backups would reveal that the autoreply to Clickshare@clickshare.com consisted of a text document labeled: "The CLICKSHARE SYSTEM: AN OVERVIEW AND SUMMARY". A copy of that autoreply, dated and emailed Sept. 25, 1995, is attached hereto as Attachment B.

In addition, an HTML page entitled "overview.html", and date stamped on our server Sept. 5, 1995, is presently viewable at: <http://www.newshare.com/News/overview.html>

EXAMINER'S REQUEST:

- (b) the additional marketing information referenced in Exhibit E;

The "marketing materials" requested by the Patent Office as referenced in this release and the M2 COMMUNICATIONS story are believed to represent auto-reply texts on the clickshare.com server. These no longer exist. It is unknown whether Newshare's server ever sent out any of those auto replies.

EXAMINER'S REQUEST:

- (c) the diagram depicting the Clickshare(sm) system for view referenced in Exhibit J;

The Examiner supplies a photocopy of a webpage retrieved from The Internet Archive on May 25, 2005 and appearing by reference to its URL to have been cached by The Internet Archive in 1998. The web page contains the words: "A diagram depicting the Clickshare(sm) system may be viewed at: <http://www.newshare.com/News/chart.html>. It is attached thereto as Attachment D1. That page, which is active, points to a dead link for the chart. However, the chart file, a low-rez GIF, may be viewed at: <http://www.newshare.com/images/chart-c.gif>, which is attached hereto as Attachment D2.

Upon information and belief, this is a chart which was prepared in 1995 to present to venture capitalists and potential technical partners in meetings covered by written or oral non-disclosure agreements. It is unknown about when it might have first been served from Newshare's public webserver.

EXAMINER'S REQUEST:

(d) the detailed text description of Clickshare (sm) benefits and operation referenced in Exhibit J;

This "detailed text description" supplied by the examiner as Exhibit J appears to be a page retrieved from The Internet Archive and appearing by reference to its URL to have been cached in 1998. The web page is entitled: "What is Clickshare (sm)? A Short Summary." Within the text is the subhead: "DETAIL." What appears to be a copy of that page may be viewed today at: http://www.newshare.com/News/capsule_summary.html, a copy of which is provided as Attachment E. This document is date stamped on Newshare's Linux server as created July 22, 1996, although the copyright notice on the bottom reads: "Copyright, 1995, Newshare Corp. All rights reserved."

EXAMINER'S REQUEST:

(e) a copy of the presentation referenced in Exhibit K;

The presentation referenced at Exhibit K was prepared by Bill Densmore when he was chairman of Clickshare Corp. for presentation at a newspaper-industry conference (Kelsey Group) at the downtown Hyatt in San Francisco on Feb. 22, 1996. It was never provided outside the company (or pursuant to a written non-disclosure agreement) other than via the web. It is presently reached from: <http://www.newshare.com/kelsey/>, and is attached as Attachment F (Including all available linked pages)

At <http://www.newshare.com/kelsey/ke198.html>, there is a hypertext link as follows:
Two publishers now testing (<http://clickshare.com/News/hearing.html>)

That link is no longer active. But the page it referred to is at:

<http://www.newshare.com/News/nearing.html>, attached hereto as Attachment G. This page is a March 18, 1996-dated news release referring to two publishers beginning “trials”. The two publishers, American Reporter and Studio Briefing, both housed their content on Clickshare/Newshare servers, not at third-party sites. In addition, the release notes: “During the second quarter of 1996, after testing of the micropayment settlement infrastructure ends, users will be able to buy pages from multiple sources, with publishers getting aggregated sales information and users getting periodic single-account billing from their home publisher.” This sentence confirms that the “trials” involved user authentication only, and only on a Clickshare Corp. server (not multiple unaffiliated servers), and did not involve any charging for content or settling of payments, functions not operational until the fall of 1996. No money was ever paid by American Reporter or Studio Briefing to Clickshare Corp. or Newshare Corp. The news-release date, lack of independent server content and lack of any financial billing or settlement service, and lack of any “sale” to the two “trial” publishers all support that the Clickshare technology could not have been on sale prior to March 7, 1996.

EXAMINER'S REQUEST

- (f) The Publisher Enrollment packet referenced in Exhibit K;

This packet is referred to as the “pubpack.” It was provided via the web in a form which could be printed. Clickshare Service Corp., the applicant, no longer uses these terms. However, the “pubpack” effective as of March 18, 1996 may be found archived at:

<http://www.newshare.com/pubpack.OLD/>, attached as Attachment H. Many of the links go to Clickshare.com addresses which will return 404 File Not Found. However, by hand-tooling the

link and changing the link to: <http://www.newshare.com/pubpack.OLD/> plus the file name, the pages can generally be accessed in archived form.

It is noted that the “Terms” page (<http://www.newshare.com/pubpack.OLD/terms.html>) contains a date of March 22, 1996 – less than a year before our provisional filing date of March 7, 1997. The License and NDA: (<http://www.newshare.com/pubpack.OLD/licensenda.html>) lists a creation date of Jan. 12, 1996, and clearly states that it is for “testing”, and imposes a non-disclosure requirement on the tester, and prohibits disclosure copying, or reverse engineering. At the time of the Feb. 22, 1996 talk in San Francisco, this was the only agreement available to any testing partner.

In addition, the “pubpack” hyperlinks to a set of documents currently remaining on the Newshare.com server, some of which purport to have been generated in the time period of interest. These are provided as Attachment I, without warranty or representation.

EXAMINER’S REQUEST:

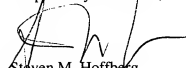
- (g) The membership agreement referenced in Exhibit L.

The membership agreement referenced in Exhibit L can be found (as noted above) at: <http://www.newshare.com/pubpack.OLD/licensenda.html>, provided within Attachment H.

At the time of the Feb. 22, 1996 talk in San Francisco, and through March 7, 1996, this was the only agreement available to any testing partner.

Applicants have sought to reply to the Examiner's request for information completely, with candor, and in good faith. If any omissions are noted, or followup requests are required, the Examiner is respectfully invited to contact the undersigned.

Respectfully submitted,


Steven M. Hoffberg
Reg. 33,511

Milde & Hoffberg LLP
Suite 460, 10 Bank Street
White Plains, NY 10606
(914) 949-3100

I hereby certify that this correspondence is being deposited with the United States Postal Services as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, Alexandria VA D.C. 20231 on 3/4/06

By 

Date 3/4/06

ATTACHMENT A

NEWSHARE CORP.'S CLICKSHARE SOFTWARE MAKES POSSIBLE DIGITAL SYNDICATES WHERE WRITERS REGAIN CONTROL OF THEIR WORK

WILLIAMSTOWN, Mass., Sept. 8 -- Writers and artists seeking to take back control of their works in cyberspace are examining the idea of a "digital syndicate," made possible by software which Newshare Corp. will unveil in early October.

"Writers are crying out for a way to manage the sale of their work in the electronic world," says Bill Densmore, president and cofounder of Newshare. "Ours is the first system to make this process as simple as the click of a computer mouse."

Clickshare (SM) makes possible the purchase and sale of information among distributed, independent publishers, authors, artists and users using the public Internet alone rather than a proprietary online service. Only transaction records must be coordinated and Clickshare (SM) does this automatically.

Clickshare (SM) is a transaction clearing system, like a credit-card network, which will pay writers royalties and publishers commissions for selling writers' work. Revenues for these payments will come from users who may purchase works by subscription or by the "download." It works economically for transactions of as little as 10 cents.

"Clickshare (SM) conforms exactly to adopted standards for the World Wide Web and does not require proprietary user browser software to operate," says Densmore. "We want Clickshare to be universal in its operation."

The company announced that it is beginning private alpha testing of the software with a handpicked group of content partners.

With Clickshare (SM), authors and artists retain their copyright and physical control of their works, selling it "by the click" or by subscription to users or publishers, with publishers receiving a commission for marketing the works.

As with a traditional syndicate, the author can thus market work through many publishers. But unlike a traditional syndicate, the author is able to precisely track how many people read, view or hear a work -- and charge accordingly if desired.

"Our Newshare Syndicate shifts the balance of economic power away from huge publishers and back to the original creative talent," says Densmore. "And our Clickshare (SM) system is an open standard which can be used by other digital syndicates besides our own."

The Clickshare (SM) registration, validation, personalization and micro-transaction process service requires

Clickshare(sm) software operating on Internet server computers where an author or artist posts their work as well as on the server where the prospective reader has an account. However it requires no special end-user software.

By enrolling with a Clickshare (SM) site, Web users can then read and purchase content at all other Clickshare-enabled sites worldwide. The Clickshare (SM) system economically tracks and charges their information purchases -- as little as five cents per download -- back to their "home" Clickshare (SM) site.

For example, a subscriber to a newspaper in San Jose, Calif., might wish to read a music review by a writer who lives in Massachusetts. If both the newspaper's and the writer's Internet connection are Clickshare-enabled, the subscriber can purchase the music review without having to separately register with the Massachusetts author.

Yet, the Massachusetts author is assured of payment, and the San Jose newspaper receives a commission for making it possible for its user to purchase a column from afar. Other newspapers worldwide participating in Clickshare (SM) could also link their readers to the music columnist and each would receive a commission when their reader "buys" a column.

Both the newspapers and the writer then receive monthly reports of how many people have read the column. They also receive monthly payments -- royalties for the writer, commissions for the referring newspapers. The papers charge their users a "per-click" charge or a subscription fee. Newshare Corp. receives a small transaction fee for each purchase, much like a credit-card company, to cover the cost of the tracking mechanism.

"Clickshare (SM) acts as a broker of original work, not an owner," says Densmore. "Physical and copyright control remains completely up to the owner, who can manage it personally or delegate it to us or a third party."

A writer may choose to permit the Newshare Syndicate or other Clickshare-enabled syndicates to negotiate rights on his/her behalf when content users request publication, reposting or other distribution rights beyond a single browse. Or the writer may choose to simply attach a notice to his/her work advising that use for other than browsing requires their permission and purchase via Email or some other method.

Clickshare (SM) server software for publishers and Internet Service Providers will be available for free 90-day evaluation by sending a request to beta@clickshare.com. A detailed description of how Clickshare (SM) works is available by autoreply to clickshare@clickshare.com. For additional marketing information send a request to mail@newshare.com. For complete information about Newshare Corp. visit the company's web site at: <http://www.newshare.com>

* "Newshare" and "Clickshare"

are registered service
marks of Newshare Corp.*

FOR MORE INFORMATION CONTACT: Newshare Corp., One Bank St.,
Williamstown MA 01267. (413) 458-8001 (Bill Densmore or Lynn
Duncan) or -- nights -- (413) 458-8667.

ATTACHMENT B

----- THE CLICKSHARE(SM) SYSTEM: AN OVERVIEW AND SUMMARY -----

The Clickshare(SM) system provides the first Internet-based protocol for charging access to information on a per-request (per page) basis among MULTIPLE, UNRELATED content bases. Information may reside on different Internet servers and be provided to users regardless of their browser software.

Clickshare is designed to allow independent publishers to exchange content among their individual subscriber users on a charge-per-page or subscription basis. Users get one-bill access to a world of content and may pay by the page or in bulk; new-media publishers can "sell" their content not only to their own users but to each other's as well.

Overview

Clickshare is a way to both validate users and exchange user-preference information among a widely-distributed, independent base of information providers. Clickshare(SM) is a system which can be applied to a variety of information distribution needs, including copyright sale and protection, database access, targetted records distribution/sale and the distribution/sale of downloadable software ("applets"). It can also be used for collecting marketing, demographic or access information seamlessly from multiple web sites.

Using Clickshare(SM): The Newshare(SM) concept

Newshare Corp. itself is applying its Clickshare(SM) technology to the problem of distributing local news worldwide on a charge-per-page basis. Newshare terms its information partners Publishing Members and each has its own group of users. These users, whom Newshare refers to as User Members, have each established a suite of preferences about how their information is to be delivered. These preferences are stored with the user's "home" Publishing Member. Each User Member maintains only one billing relationship -- also with the "home" Publishing Member. We speak of a Universe of Clickshare-enabled content, the sum of all the information provided by all the Publishing Members. Using Clickshare, the Publishing Members share users -- that is, give the users access to this universe -- while simultaneously respecting each user's preferences and "settling accounts" for all information transactions by these users. The Newshare Syndicate creates a marketplace for free-lance writers, artists and other small content providers to sell their work direct-to-users.

The Clickshare(SM) system operates transparently to users to:

- * allow a new user into the system
- * validate each request made by a user
- * invalidate a user (end a user's "session")

Each time a user makes a request for information (by selecting a hypertext link in his/her Web browser), the Publishing Member obtains from Clickshare(SM) preference information for that user provided by the user. With this information in hand, the Publishing Member knows that the user is valid and can return to the user information tailored to the user's preferences.

The Clickshare(SM) system records all information transactions for the later process of settlement. At this time, the content provider receive a royalty for individual "sale" of pages of information; the user is charged; and the user's home Publishing Member receives a commission. Clickshare also collects a transaction fee.

A session example: The key is anonymity

Let's follow a user through a typical use of his information service. When you proceed to the live demonstration, you'll find something similar to this sketch.

John decides to read the news after work. He opens a session with his "home" Publishing Member using World Wide Web software of his own selection (and internet service support of his selection, too). He opens this session by requesting his own "homepage" at his "home" Publishing Member's Web site. This causes the Publishing Member to check with Clickshare(SM) to establish John as a valid user. In the process, Clickshare(SM) temporarily stores information about John's personal information preferences. This make it possible for unrelated content providers to also know -- temporarily and anonymous -- John's preferences. But the unrelated providers have no basis to connect these preferences to an actual person, only a Clickshare(SM) user. Only John's home Publishing Member knows who John is. This feature -- anonymity -- is an important feature requested by privacy experts.

John can thus visit any number of Publishing Members in the Clickshare universe. Each time, the information John receives back suits his preferences. Thus, no matter "where he travels" (that is, how many divergent hyperlinks John traverses) John is consistently validated to each information provider. And, he is validated transparently (that is, without the need for interruption via user/password prompt).

Key Points About Clickshare

1. Clickshare is transparent to the user
2. Clickshare requires no special features in the Web client
3. Clickshare works within existing industry standards (as described in Internet standards documents, not simply by norm) thus imposing no proprietary modifications to the Internet environment
4. Exchange of preference and service information is enabled across independent information providers
5. Individual information providers each maintain their own base of customers
6. The user maintains one account relationship but has unimpeded access to the universe of Clickshare content.

For more information contact:

NEWSHARE CORPORATION	
One Bank St., P.O. Box 367	mail@newshare.com
Williamstown MA 01267	voice: (413) 458-8001
"The Internet's first news brokerage"	http://www.newshare.com



What's new with Clickshare

Worldwide information exchange

CLICKSHARE FOR PUBLISHERS: ALL THE FACTS

GO IMMEDIATELY TO REGISTRATION

HOW IT WORKS: A DIAGRAM OF THE CLICKSHARE(sm) SERVICE

What is the purpose of Clickshare(SM)?

Imagine returning to a day when making a long-distance telephone call required that you talk to an operator. Or suppose each time you wanted to chat with an aunt in Popperville you had to give credit-card information to three different phone companies to handle your call.

Now imagine if you were asked to provide your credit card each time you "linked" to a new resource on the Internet.

Clickshare(SM) has been designed to avoid such inconvenience, providing a one-bill, one-standards system for the purchase and sale of information electronically which protects privacy and copyright.

Clickshare(SM) is designed to:

- Allow independent publishers to exchange content among their individual users on a charge-per-page or subscription basis, with royalties and commissions assured.
- Give consumer users one-bill access to a diverse world of content, **across multiple unrelated Internet servers**, and payable by the page or by subscription.
- Permit searching and serving of user information requests based upon predetermined topical interests the user has provided.
- Provide advertisers, sponsors and content owners with reliable, third-party tracking information about viewership on Clickshare-enabled pages containing their marketing message.
- Allow free-lance writers to sell their works direct-to-consumers or verify sales by their publishers on a "per download" basis.

This first document explains what the demonstration will show and how Clickshare works.

Additional background information on why we implemented **Clickshare** is available in the form of a [discussion of the problem](#). General information about [Clickshare Corporation](#) and [Newshare Corp.'s mission](#) are also available.

Here we provide:

- [An Overview of Clickshare](#)
- [Using Clickshare\(SM\): The Newshare\(SM\) system](#)
- [A Session Description: Anonymity](#)
- [A Summary of Key Points](#)
- [A Link to the "Live Demo"](#)

Overview

Clickshare is a way to simultaneously *validate* users and *exchange user-preference information* among a widely-distributed, independent base of information providers. Clickshare(SM) is a system which can be applied to a variety of information distribution needs, including sale of copyrighted material such as news articles, access to indexed database records -- anyplace where by-the-item compensation is desirable. It can also be used for collecting marketing, demographic or access information seamlessly from multiple web sites.

Using Clickshare(SM): The Newshare(SM) concept

Newshare Corp. itself is applying its Clickshare(SM) technology to the problem of distributing local news worldwide on a charge-per-page basis. Newshare terms its information partners **Publishing Members** and each has its own group of users. These users, whom Newshare refers to as **User Members**, have each established a suite of preferences about how their information is to be delivered. These preferences are stored with the user's "home" Publishing Member. Each User Member maintains only **one** billing relationship -- also with the "home" Publishing Member. We speak of a *universe of Clickshare-enabled content*, the sum of all the information provided by all the Publishing Members. Using **Clickshare**, the Publishing Members *share* users -- that is, give the users access to this universe -- while simultaneously respecting each user's preferences and "settling accounts" for all information transactions by these users.

Clickshare(SM) is not just for large publishers. **The Newshare Syndicate** creates a marketplace for free-lance writers, artists and other small content providers to sell their work direct-to-users.

The Clickshare(SM) system operates transparently to . . .

- **allow a new user into the system**
- **validate each request made by a user**
- **invalidate a user (end a user's "session")**

. . . at one or many web sites, without continuous reregistration.

Each time a user makes a request for information (by selecting a hypertext link in his/her Web browser), the information-providing Publishing Member obtains from Clickshare(SM) preference information that the user has previously provided to his home Publishing Member at signup. With this information in hand, the information-providing Publishing Member knows that the user is valid and can return to the user information tailored to the user's preferences.

The Clickshare(SM) system records all information transactions for the later process of settlement. At settlement time, the content provider receives a royalty for individual "sale" of pages of information; the user is charged; and the user's home Publishing Member receives a commission for having forwarded his users to other sites. Clickshare also collects a transaction fee.

A session example: The key is anonymity

Let's follow a user through a typical use of his information service. When you proceed to the [live demonstration](#), you'll find something similar to this sketch.

John decides to read the news after work. He opens a session with his "home" Publishing Member using World Wide Web software of his own selection (and internet service support of his selection, too). He opens this session by requesting his own "homepage" at his "home" Publishing Member's Web site. This causes the Publishing Member to check with Clickshare(SM) to establish John as a valid user. In the process, Clickshare (SM) temporarily stores information about John's personal information preferences. This make it possible for unrelated content providers to also know -- temporarily and anonymously -- John's preferences. But the unrelated providers have no basis to connect these preferences to an actual person, only a Clickshare(SM) user.

Only John's home Publishing Member knows who John is (in the sense of having John's demographic information). This feature of "privileged anonymity" distinguishes Clickshare from a myriad of other "user-preference" proposals -- and meets concerns of privacy experts.

John can thus visit any number of Publishing Members in the **Clickshare** universe. Each time, the information John receives back suits his preferences. Thus, no matter "where he travels" (that is, how many divergent hyperlinks John traverses) John is consistently validated at each information provider *and* each provider is able to respect John's preferences. John is validated -- and his preferences are obtained -- "transparently" to John and without undue delay caused by prompts for authentication.

Key Points About Clickshare

1. The user maintains one *account relationship* but has unimpeded access to the universe of **Clickshare** content.
2. Exchange of preference and service information is enabled across independent information providers while maintaining user privacy.
3. Individual information providers each maintain their own base of customers and physical control of their copyrighted information to make price changes and updating simple.
4. No proprietary software must be provided to the user.
5. The continuous validation occurs transparently to the user.
6. **Clickshare** works within existing industry standards (as described in Internet standards documents, not simply by *norm*) thus imposing no proprietary modifications to the Internet environment

Let's Get On With It

One last point. Though the goal of **Clickshare** is to be as *transparent* as possible to its actual users, this demonstration wants to inform interested people about how **Clickshare** actually works. So we're eliminating some of the transparency. Please bear with us if something seems too exposed or if we're not able to show you all the machinery you want to see. Better to address detailed questions to the [author](#) if you don't find what you're looking for.



Onward ...

author: **Dave Oliver**, Newshare Corp. Managing Director, Technology

email: mail@newshare.com

date: 9-3-96 bd

Newshare[®]

NEWSHARE QUICK LINKS TO:

[NEWS TOP](#) / [WORLD NEWS](#) / [STATE NEWS \(U.S.\)](#) / [LOCAL NEWS](#) / [SPORTS](#) / [BUSINESS](#) /
[WEATHER](#) / [TOPICS](#) / [WHAT'S NEW](#) / [SYNDICATE](#) / [CLASSIFIEDS](#) / [LEAVE A COMMENT](#)



Service Diagram



BACK TO ARTICLE

Key:

1. Users (subscribers) select hypertext links via any WWW browser which uses HTML 2.0 standards. The URL request is transmitted over the net as an http request. If the request is to information at the user's home Publishing Member, the user is prompted to register for the start of a Clickshare(sm) session. Following successful authentication, user freely accesses and views information.

2. Users (subscribers) to Publishing Member A select hypertext links via any WWW browser which uses HTML 2.0 standards. The URL request is transmitted over the net as an http request. If the request is to information at any Clickshare(sm)-enabled location OTHER THAN the user's home base, the remote Publishing Member authenticates the user with the Clickshare(sm) Authentication and Transaction Settlement Service. Following successful authentication, user freely accesses (and may purchase) information.

3. Authentication queries and replies between the Publishing Member's Clickshare(sm)-enhanced server and the Clickshare "back end" Authentication and Transaction Settlement Service are private-key encrypted. Micro-transaction settlement data, and advertiser third-party log validation (tracked by individual users) is also passed in this fashion. No credit-card information is passed across this link at any time.

4. Royalties for content sales due to the copyright-owning Publishing Member and "referral commissions" due to the User's home-base Publishing Member are settled at least monthly among the entire Clickshare(sm) Publishing System membership. Clickshare's operator, Newshare Corp., retains a transaction fee on each sale.

5. An off-net database of completed micro-transactions and usage tracking is assembled in real time by the Clickshare backend and is used to supply consumer users with a report of their account once every 24 hours upon request. It is also used to assemble and supply billing information to Publishing Members (or their designee) and advertising third-party tracking data. This database NEVER contains names of consumer users. Names are held ONLY by the Publishing Member who enrolls the user/subscriber.

CLICKSHARE QUICK LINKS TO:

[CLICKSHARE HOME PAGE](#) | [TEST DRIVE CLICKSHARE](#) | [NEWSHARE/CLICKSHARE CONCEPT](#) |
[VISION 1997](#) | [VISION 1979](#) | [NEWSHARE/CLICKSHARE NEWS](#) | [GENERAL NEWS TOP](#) | [NEWS](#)
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clickshare
clickshare service corporation

Creating a free market for digital information

Charging per click:

TV in the '50s, the 'Net in the 90s; three examples of real-world clicking and why per click will work with The Clickshare System

*By Bill Densmore
Clickshare Corp.*

The WWW is where television was in its infancy where there was no way to make a subscriber association between a television viewer and the programming source. And therefore it was thought that the only way to fund television programming was with advertising. That worked really well throughout the '60s and even into the '70s, until a little idea born as a technology solution to a technological problem -- cable -- forced a new paradigm on television.

Cable got its start in little towns in America, far out from metropolitan areas, where viewers wanted to be able to receive a better television signal and were willing to pay for it. As cable began to wire the big cities, and satellite technology advanced, smart programmers realized they could charge cable operators for programming and that if the programming was compelling enough, the operators could charge their subscribers for a premium channel.

That was the start of the market segmentation of television. Broadcast television remains very profitable, but it is now strictly a mass-market medium. And broadcast television will suffer in the era of disaggregated content that we are entering as "fat pipes" allow point to point communication. Television started as a sponsored model and has evolved to a hybrid model that is both sponsored and subscription.

Examining the growth of television, voice telephony and grocery purchase offers insights into the likely success of Rper-itemS purchase as the Internet matures. It shows how technology appears inevitably to result in greater consumer choice through product disaggregation.

VIDEO TAPE RENTALS: TV PER CLICK

Now it is also possible to buy programming on a pay per view, "per click" basis both from your cable company, if it has a programmable system, and by going to the neighbor videocassette store and renting a movie. Now who would have predicted in the '60s that somebody would pay \$2.50 to rent a movie for one night when they could get it seemingly for free on television? The answer is that what you pay \$2.50 to view at a video store, because of the economics of the marketplace, is now typically more recent or higher quality entertainment than what you can view on advertising sponsored broadcast television. And the viewing of it can be personalized to your schedule. And that's why people are willing to pay for it whether it is delivered digitally by your cable

company direct to your home or whether you have to physically pickup a cassette tape.

LONG DISTANCE: WHATUS YOUR NUMBER?

In the telephone industry, much earlier, it was a universal billing settlement system which allowed us to make a call from a phone connected to AT&T to another phone connected to MCI or Sprint and have the connection go through in a few milliseconds. Most of us are old enough to remember when making a long distance call even 15 miles or so would involve an intercept operator coming on the line and saying, "Your number please?" The technology was too primitive to allow the background transfer of your number for billing purposes. Now we even have universal Caller ID, for better or worse. Look at how casually we now pick up the phone and make a long distance call for which we are billed "by the bite" or "by the touch." All the charging is buy the minute in background, even though you as the consumer may pay for it with a variety of calling plans, some of them involving a flat monthly payment.

FOOD PURCHASE: IT'S YOUR BAG, TAKE IT OR LEAVE IT

When you go to the supermarket, you don't purchase your groceries by subscription because you don't have to. Modern food distribution has made it possible for you to pick items one at a time and pay for them individually. In the 18th century, you bought in bulk and pretty much the same thing the farm family down the road bought if you didn't grow it yourself. Imagine if you went into a grocery store and went to a counter where a clerk said: RHere is your bag of groceries, it has the same contents as every other bag and the cost is \$20, take it or leave it.S That is the choice consumers must make today with physical publishing. They can take The New York Times or leave it; they have no option to modify it. It is axiomatic that once the technology makes "a la carte" purchasing easy and cheap, some segment of the consuming public will demand it. Some others will still perhaps prefer to buy in bulk.

THE HOURGLASS AND THE CYLINDER

This sort of paradigm shift can be expressed with a chart that we call the hourglass vs. the cylinder.

In the 20th Century, information has moved as if through an hourglass. No matter how many information providers or users, there was always a technological pinch point that forced for economic reasons an editing process -- the speed of a modem, cost of adding pages, or limited hours in the broadcast day. And a natural force -- call it "gravity" -- made it difficult for the consumer to send information back up the hourglass to the information provider.

In the next century, information will move about as if in a cylinder. Now bandwidth -- the "fat pipe" -- is no longer the most significant constraint. The real constraint is peoples' ability to digest the huge volume of information coming down the pipe. So users have to join more than ever with editors in deciding which information they will receive.

Actually, the cylinder should be displayed on its side. Because there is no longer any reason to depict the information provider as "higher" than the information consumer. In fact it won't be at all clear much of the time who is the consumer and who is the provider, since those roles can reverse as easily as they do during a present-day voice telephone conversation.

THREE BUSINESS MODELS EVENTUALLY POSSIBLE

y If you look around, you can see the everything free, subscription only and pay-per-click business models already operating in electronic-information delivery.

The free model is what's most evident on the WWW right now. With vast free information from -- by Steve Outings' latest count -- 800 or more newspapers up in the last year, only now are some papers gathering the resolve to figure out how to start charging for it.

The consumer online services have for years built a user base -- although in two out of three cases arguably with

no operating profits -- charging a subscription and delivering "all-you-can-eat" service up to some hourly minimum. Of AOL, Prodigy and Compuserve the one which has shown undeniable profits was the one which had a hybrid subscription and per-item charging model -- Compuserve.

The third model, also a hybrid, is skewed toward "charge-per-click" and has been very successful for the proprietary, business-information data aggregators such as Dialog-Knight Ridder Information Services, DataTimes, Dow Jones News Retrieval, West Publishing, Lexis-Nexis, Information Access Co. and a half-dozen or so others. So there is plenty of evidence that consumers will pay for things "by the click" if they want them badly enough.

WILL SURFERS PAY BY THE CLICK?

The perception is that consumers won't pay by the click on the Internet and the reason for that perception is that so much of the information on the Internet is largely undifferentiated. You can find wire-service reports at dozens of sites; you can find national news at maybe hundreds of sites; you can find government information all over the place. But what you won't find is some of the specialized information that's been sold routinely for years by the proprietary aggregators. And the reason you won't find it is there has been no adequate business model for charging for it.

That's changing. As of perhaps six to eight months ago, pioneered by such enterprises as First Virtual Holdings Inc., Netscape Communications Corp., Open Market Inc. and a handful of other vendors, you can now establish a web site where you can readily subscribe your users and at the very least charge them a flat-monthly rate and vend them information, keeping track of what the user views and when. Increasingly in the more sophisticated web-site management programs you can aggregate a-la-carte, per-click charges to individual pieces of information and charge those periodically to a credit card or other credit facility.

So the WWW business model has been advanced to the stage of what the traditional telephone market would look like if each of the Baby Bells and independent telcos had their own billing systems that didn't interoperate with each other. You can imagine how you would feel about that if you had your service from the State Long Distance Telephone Co. in Elkhorn, Wis., and couldn't call 40 miles to Milwaukee without opening up a second account with Wisconsin Bell. But that's where things stand today on the Internet. What's needed is a one-bill, one password system that works across multiple, independent Internet publishers that allows those publishers to share users and information easily and profitably.

THE CLICKSHARE ACCESS AND PAYMENT SYSTEM

We've tried to lay out in a general way the technological and business challenges of the World Wide Web as we enter the next century. Clickshare Corp. has funded development of the Clickshare Access and Payment System because we think what's needed is a distributed user-management system which authenticates users and enables subscriptions or micropayments down to 10 cents across multiple Internet servers.

Here's a graphical depiction of how Clickshare works:

Think of Publisher A as an Atlanta newspaper and Publisher B as a Boston newspaper. And imagine for a moment that both of these papers have web sites and that in each case they enroll users for \$5 a month and allow their own users "all-you-can-eat" access to basic news resources for that price. Now let's suppose a baseball fanatic in Atlanta wants to read a Red Sox pregame workup and finds a link to the Boston newspaper's story at the Atlanta web site. Click . . . the reader goes to the Boston site. But here the Boston server, in the present world, says "Sorry, access prohibited -- please subscribe." The user, faced with paying \$5 for one article and starting a second ongoing \$5-a-month relationship just skips the article and the Boston paper loses a "single-copy" sale.

Now consider if both newspapers were running Clickshare Web Server Software and were Clickshare Publishing Members. Repeat the scenario. Now the Atlanta readers request goes out with a digital calling card.

And that card, read by the Boston server, says, "This user is a Clickshare-enabled user and has an account at the Atlanta Clickshare member." The Boston paper sells the article for, say, 10 cents at wholesale. The reader gets his article with no additional password or challenge. At settlement time, Clickshare Corp. applies a 10 cent charge to the Atlanta newspaper's clearing account and pays the Boston newspaper 8 cents, keeping 2 cents as a transaction fee. The Atlanta newspaper to charge its user whatever it wishes. It could pass along the 10 cents, apply a 20% retail markup to 12 cents, or bundle the Boston story as part of a premium subscription package. Clickshare does not set pricing at the user level because it doesn't own the user -- the home-base publisher does.

We think our system, up and running with two trial publishers, provides three essential requisites for jump-starting Internet information commerce:

- The first is to make sure that advertisers can make apples-to-apples comparisons about identifiable users and what they are looking at across all participating web sites, much as the Audit Bureau of Circulations serves as an independent authority for verifying newspaper circulation. By authenticating and indentifying individual users, rather than machine addresses, Clickshare also make possible classes of services for admitting or qualifying user access to free sites or corporate "intranets."
- The second reason is to put in place a protocol which can move across the Internet information preferences and voluntarily-submitted demographic attributes of a user. This is essential information if the Internet's promise as a medium for personalization of information delivery is going to be realized.
- And the third reason is so that users can have the convenience of one bill and one universal ID and a "digital calling card" that with Clickshare will automatically accompany their information requests across the World Wide Web. Each time they request information from a new site, that site knows who they are, exactly where they came from, that they have good credit, and that the new site will be assured of getting paid after it vends the requested information or software.

This, by the way, does not mean that the site that's selling information has to know the name or any private demographic information about that user. It only needs an anonymous ID number of the purchasing user. And that's the way our Clickshare service is set up -- to respect user privacy and store the user's name only at the user's home-base publisher, not with any central database which we control.

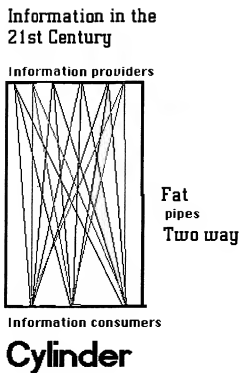
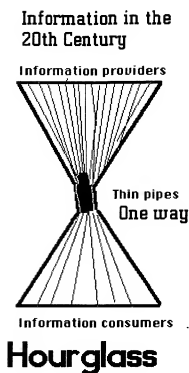
CLICKSHARE QUICK LINKS TO:

[CLICKSHARE HOME PAGE](#) | [TEST DRIVE CLICKSHARE](#) | [NEWSHARE/CLICKSHARE CONCEPT](#) | [VISION 1997](#) | [VISION 1979](#) | [NEWSHARE/CLICKSHARE NEWS](#) | [GENERAL NEWS TOP](#) | [NEWS TOPICS](#) | [WHAT'S NEW](#) | [LEAVE A COMMENT](#)

Clickshare is a service mark of Clickshare Corp.

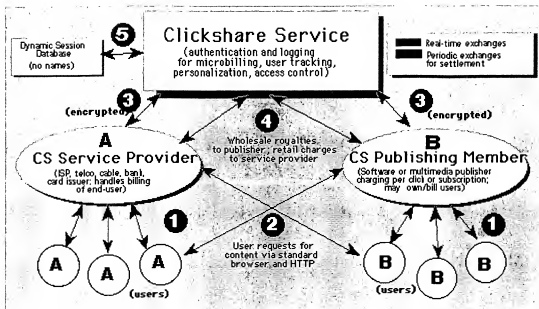
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[ARTICLE](#)

[BACK TO](#)



Attachment E

*The Internet's information brokerage*

What is Clickshare(sm)? A Short Summary

SYNOPSIS:

Clickshare(sm) is a system which:

- (a) registers, authenticates and profiles users
- (b) enables third-party tracking of World Wide Web usage, and
- (c) makes it possible to charge by subscription or per-query for usage tracking and information transactions across multiple unrelated servers.

It is a core technology for building a worldwide free market for digital communications -- a true information exchange -- because it makes the sale of information in increments of a few pennies economically feasible.

DETAIL:

Clickshare(sm) is the platform on which the consumer of the next-century can access a free market of independently owned content yet pay for it from a single credit facility. Because it aggregates charges for monthly (or more frequent) settlement, no credit-card information -- or the name of the purchaser -- must traverse the 'net.

The Clickshare(sm) service requires publishers to use Newshare's Clickshare-enhanced HTTP server, which registers and profiles users at a single publishing site. After Jan. 1, 1996, this software is provided free under license. It is available now to qualified users as a beta product.

Our backend service network, to which content-owners must subscribe, then exchanges data with the Internet HTTP servers of Clickshare-enabled sites, validating users and tracking across multiple, unrelated Clickshare-enhanced sites all discrete page access, whether chargeable or free. This tracked data is aggregated and forms the basis of a system, much like an ATM network, for charging activity back to the credit-home of the user, clearing commissions, royalties and transaction fees.

Clickshare(sm) aggregates micro-charges for content (we believe it can be economic down to as little as a nickel per query) served to WWW users regardless of where they have their "home" credit relationship. We leave the marketing contours of the user relationship, including pricing, up to the affiliated Publishing Member.

Because it tracks known users (rather than IP numbers), Clickshare(sm) also has value as a third-party circulation/viewership auditing mechanism for the advertising and publishing industry. Clickshare preserves

users' rights to privacy however by decoupling authenticated access from specific demographic and credit information.

And because it suggests a standard registration and profiling protocol, it provides a basis for customization and personalization of information delivery according to a user- provided profile.

A diagram depicting the Clickshare(sm) system may be viewed at:

<http://www.newshare.com/News/chart.html>

For a more detailed text description of Clickshare(sm) benefits and operation, visit:

<http://www.newshare.com/Clickshare/overview.html>

Our archive of press releases is at:

<http://www.newshare.com/News>

NEWSHARE QUICK LINKS TO:

| [NEWSHARE/CLICKSHARE CONCEPT](#) | [VISION 1997](#) | [VISION 1979](#) | [NEWSHARE/CLICKSHARE NEWS](#) | [NEWS TOP](#) | [TOPICS](#) | [WHAT'S NEW](#) | [HOME PAGE](#) | [LEAVE A COMMENT](#)

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Building a free market for digital information

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Audience Measurement with the Clickshare Service

Interactive Newspapers '96 Conference
February 22, 1996
San Francisco CA USA

After Monday, a copy of this presentation will be available on-line at:

<http://www.clickshare.com/kelsey/>

A demonstration of the Clickshare Service is available at:

<http://www.clickshare.com/tryit.html>



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Audience-measurement challenges

Privacy vs. identified user

- Profiling for personalization
- Marketing demographics
- Content financing (subscription, per item, sponsored)

Data quality

- standardized ("apples to apples")
- independently auditable (like ABC, BPA)
- cross-server, cross-site
- tie to credit relationship

Data control and access

- Who owns/controls "visit" and profile information?
- How can it be used?
- Where are names/addresses stored?
- Where are access ("visit") or billing records stored?

User interface

- Registration required: But how?
- How many extra steps, how often?
- Intrusive or background?



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Mission statement (10-94):

To create an electronic brokerage for the . . .

- *profitable*, multi-media sharing of information and users
- among independent publishers
- on a subscription or charge-per-query basis

which is . . .

- based on open standards,
- is customizable,
- gives users a single "access-point"
- and leaves publishers in control of their user base.



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MISSION:

Make the Internet the **easiest** and **best** way for consumers to obtain the quality information products they want.

- **EASY** -> one-ID, one-click simplicity
- **BEST** -> a free market among independent publishers
 - open pricing model
 - Subscription, free or "by click"
 - Levels of advertising intrusion
 - Data tools for personalization
 - A new way to direct market: Pay-per-view ads
 - User management, not digital cash



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What IS Clickshare?

The Clickshare Access and Payment Service is free-distribution Web server software and a member-only backbone service which work together to authenticate users across multiple, independent Internet sites. The system tracks user movements anonymously and aggregates their microtransactions to a single bill managed by the user's "home-base" publisher.

Clickshare is working in alpha now at: <http://www.clickshare.com/tryit.html>. Settlement of micropayments will begin by QT3, 1996.



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What Clickshare DOES do

1. Allow independent publishers to share users/information across multiple sites
2. "Session"-oriented user authentication
3. Validation of user to multiple sites with a single ID
4. Real-time, off-site aggregation of user page access for:
 - o Verifiable third-party audience measurement
 - o Micro-transaction enablement
5. User profiling and optional serving of custom information:
 - o By service classes (sub-networks)
 - o By expressed topical interests



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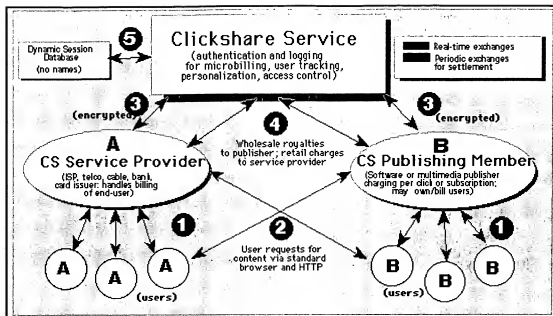


What Clickshare DOESN'T do

- **Demographic-analysis reports**
 - Seek to interoperate with and "vend" data to: Group Cortex/Interactive Alliance, I/Pro, WebTrack, Netcount, others
- **Enable (or disable) "secure credit-card transactions"**
 - Other credit relationships possible: Telcos, direct check
- **Apply charges directly to consumer accounts**
 - Consumer relationship -- including pricing, billing -- "owned" by publisher
- **Sell demographic information without permission**
 - Clickshare doesn't "own" it; publisher does



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Publisher/system vendor benefits:

Publisher "owns" users

- User demographic data local; page-access data systemwide.

Distributed information, copyright

- Information resides locally; available globally; copyright preserved

Shared transaction settlement automated

- Near-automatic sharing of users/revenues with other publishers

Audience-measurement facility built in

- Provides "identifiable user," apples-to-apples measurement for multiple enabled sites


System architecture scalable

- Authentication/tracking/settlement backend expands to redundant, worldwide servers

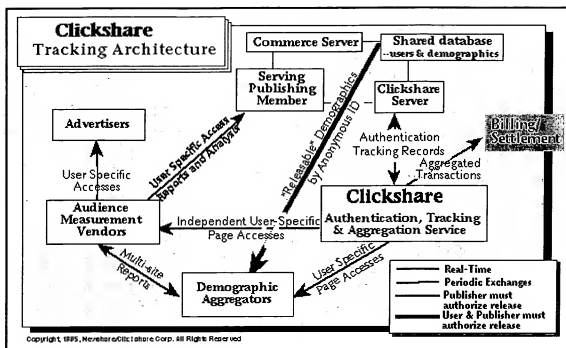
Multi-vendor, multi-source elements

- Serving, database, billing, settlement, audience-measurement, content.




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Clickshare Tracking Architecture



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What Type of Tracking Data Available?

Information about User

- universal user ID #
- home publisher ID #
- user's host address
- session ID #
- service class
 - page count delivery limit
 - service priority
 - page value class limit
 - customer group
- preference flags
 - content access privacy
 - premium charge notification
 - parental discretion / adult content
 - advertising sensitivity

Information about Resource Requested

- content publisher ID #
- URL
- time/date
- page value class
- content length

Factoids

Provides aggregated census by identifiable user

Access to Clickshare-enabled content, free or charged-per-query, is aggregated at the Clickshare Transaction Logging Facility keyed by user ID, organized by "home" publisher, grouped by settlement period

User ID number, Publisher ID number are globally unique

The tuple [userID|+|home publisherID] is globally unique within the Clickshare universe, and can be used for access to any Clickshare-enabled site.

User ID is (almost) globally anonymous

The user's personal and financial information is stored only at the user's designated "home" publisher or access provider. Only the home publisher or access provider can "link" the ID with the demographic information.

Clickshare never sees user names

All logging and transaction settlement done by Clickshare use only the user ID and home

publisher/provider association. All matters that require access to user demographic information (billing, e.g.) are handled by the home publisher/provider.

Only user authorizes use of demographics

The user must authorize the release of demographic and financial information by the home provider.



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What are the benefits to advertisers?

True third-party validation of Web usage

The Clickshare Transaction Logging Facility maintains a separate transaction record for each access off-site and out of the control of the originating server. Clickshare is not dependent on the integrity of local server logs.

Systemwide identification of individual users

Clickshare-enabled users have a globally unique identification number which is valid throughout the Clickshare universe. Full differentiation of "eyeballs" is possible. Access periods are also segmented into "sessions" (which are "enforced" by a well-specified limit on authentication validity).

User-centric (not site-centric) tracking

Access records are stored at the Clickshare Transaction Logging Facility keyed by global user ID and home publisher/provider ID. The **path** of single user's access to **any** Clickshare-enabled site during any given access session is easily accessed. Currently, this multi-site log is aggregated in real-time.

Usage data aggregated independent of demographic data

Clickshare Corporation maintains no permanent database of users or their demographic information. Usage of any Clickshare-enabled service is tracked by anonymous (but globally-unique) identifier, keyed to the provider who maintains the billing relationship with that user.

User validated by credit relationship

- The "financial architecture" of the Clickshare Service provides a high likelihood that users of the service are "credit-qualified". This reduces the likelihood of "phantom" users.
- The Clickshare Service provides a well-defined **Test Drive User** service class for users who wish to try the service on a demonstration basis. usage by such users is tracked in a similar fashion.

"Local Control" of Demographics, topic interests enabled

The user's home publisher/provider controls access to the user's demographic information by third parties, with consent of the user.



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What are the benefits to consumers?

Single relationship with "most-trusted" publisher/provider

- local news organization
- national publisher (magazine, newspaper, broadcaster)
- topic-specific content service
- Internet service provider or telco

Single ID access to universe of resources

Personal privacy respected

- Demographics, topical-interests stay with "must-trusted" publisher

Single-bill access to chargeable information

Personalization starting point

Market-oriented fee structure

- free content (subsidized access)
- subscription (partial subsidy)
- per-query charging (no subsidy)



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Clickshare transactions database

Built in real time, maintained off-net

What does it contain?

- URL, date, time of page/script accessed
- Anonymous user number
- Content-owning Publishing Member ID number
- User-owning Publishing Member ID number
- Page price value
- Service class designator
- Session identifier
- Other open datablocks could carry:
 - *Releasable demographics*
 - *Topical preferences*



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What can be included in Publisher ID?

Sub-Network membership

Hypotheticals: NCN, Infinet, CCC, "private clubs", "intranet"

Content class

Topic, news, sponsored, advertising, archival

Geographic locus

Country, region, state, zip, census tract



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Unresolved service issues

Records ownership

May Clickshare sell records of anonymous user access to specific publisher's pages?

Referral fee -- retail markup

Retail markup rate must be established by publishers, not by Clickshare

Data exchange

Transfer methodology/protocol standard to third parties (audience measurement, demographic aggregators) unsettled:

- TC/IP via Interent?
- Proprietary wire?
- Physical medium?
- Working with The Interactive Alliance, I/PRO, others



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Standards Recommendations

URL-naming protocols for:

- Content type
- Ad content
- parental option Y/N

Connection information

Standards-based protocol for maintaining "state"

Website classification

UPC- or library-style numerical coding

FIRST STEP: Clickshare alpha includes publisher identifiers, service classes



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STATUS: Clickshare Access and Payment System (CAPS)

- **Demonstration operational since October 1995**
- Two publishers now testing
 - ACH settlement began testing Feb. 21
- Clickshare Web Server available for the most-common Unix(tm) platforms
- Alpha testing underway
- Beta testing expected 2Q 96
- Basic authentication, registration, personalization

Publisher Enrollment Packet available at:

<http://www.clickshare.com/pubpack/>



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Clickshare Access and Payment System (CAPS): Status

Clickshare Web Server available for the most-common Unix(tm) platforms

- including Linux on Intel Pentium hardware; Sun Solaris; DEC Alpha
- current web server is a "reference implementation" of client side of Clickshare service and is designed to be ported to other server architectures.





STATUS: Clickshare Access and Payment System (CAPS)

Alpha testing underway

- no transaction settlement enabled
- small number of content and technical partners (less than 15)
- service class and page value class parameters being solidified

Beta testing expected second quarter 1996

- transaction settlement to be enabled
- larger number of content and technical partners (up to 50)
- access information to be provided to audience-measurement community through Interactive Alliance and others



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Clickshare Access and Payment System (CAPS): Status

Basic authentication, registration, personalization

- Clickshare, during alpha and beta deployment phases, will use HTTP "Basic Authentication". Further development of user authentication protocols is being closely monitored.
- A standardized (but locally customizable) registration regime is available
- Basic personalization - based on usage preference flags only - is enabled

Publisher Enrollment Packet available at:

<http://www.clickshare.com/pubpack/>



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Building a free market for digital information

After Monday, a copy of this presentation will be available on-line at:

<http://www.clickshare.com/kelsey/>

A demonstration of the Clickshare Service is available at:

<http://www.clickshare.com/tryit.html>

Building a free market for digital information

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(413) 458-8001



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Recent Clickshare press releases

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Attachment C

Clickshare Closes In On Internet Microtransactions and Measurement

WILLIAMSTOWN, Mass., March 18-- Two publishers have begun trials of a unique technology allowing Internet micropayments by the click, said Clickshare Corp. Monday.

The Clickshare Access and Payment System gives users a "digital calling card" allowing them to charge purchases from publishers at many websites to a single account. It also tracks visits to advertiser-supported pages and supports authentication for "intranets".

Initial publishers are:

* *Studio Briefing*, a daily entertainment industry news intelligencer.

* The writer-owned *American Reporter* calls itself the Internet's first digital-only daily.

Multi-site user authentication is now operational. Customers starting at Clickshare [Try It](#) can register at either Web site, which becomes their "home". They can then use the other site during a session without being prompted for an ID or password.

"Soon we'll be able to offer publishers a new revenue stream -- selling each others' information for as little as a dime per click, seamlessly exchanging royalties," said Bill Densmore, Clickshare chairman and CEO.

"Clickshare creates the opportunity publishers have been waiting for -- the ability to get paid."

Customers make payment arrangements off-line, so no credit information crosses the Internet. During the second quarter of 1996, after testing of the micropayment settlement infrastructure ends, users will be able to buy pages from multiple sources, with publishers getting aggregated sales information and users getting periodic single-account billing from their home publisher.

"We've been careful not to announce 'vaporware'. Though we're still in development, we're far enough along -- technically and with potential strategic partners -- to present Clickshare as an option for online businesses," added Densmore.

Clickshare's focus on microtransactions (purchases of information, software "applets," and other data typically priced under a few dollars) means it is complementary, not competitive, to other e-cash systems, said Densmore.

"Clickshare, operating across multiple unrelated sites, working with any browser, and requiring no central database, also provides an ideal verification utility to track web audiences for advertiser-supported pages, with low impact on personal privacy," says Densmore.

Massachusetts-based Clickshare was spunoff from Newshare Corp. in December. It is privately funded and is in negotiation with strategic equity partners.

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MEDIA INQUIRIES:

Felix Kramer, Kramer Communications, 212/866-4864 <felix@clickshare.com>
or Bill Densmore or Lynn Duncan, 413/458-8001 <corp@clickshare.com>

Newshare Corp. Joins Ad Industry's Interactive Alliance; Says Its Clickshare System Will Support "CASIE" Guidelines

WILLIAMSTOWN, Mass., Nov. 13 -- Newshare Corp., developer of the Clickshare tracking and transaction system, said Monday it had joined the Interactive Alliance, an advertising-industry consortium developing Internet audience-measurement standards.

The company also said it will support privacy and other guidelines contained in an industry white paper developed by the Coalition for Advertising Supported Information and Entertainment (CASIE). CASIE's members control the majority of the \$150 billion U.S. advertising market.

"The addition of Clickshare adds strength to The Interactive Alliance," said Marshall L. Snyder, executive vice president, Arbitron NewMedia and an alliance founder. "Their business proposition has the potential to generate large numbers of identified web users."

Newshare Corp. is alpha-testing its Clickshare system, which enables Internet publishers to cooperate in generating and sharing content revenues. The absence of a micro-transaction information standard has prevented many publishers from using the World Wide Web so far.

Under Clickshare, each consumer chooses a most-trusted publisher to whom to identify himself/herself and Clickshare will never see the names. That publisher and user determine how the user's name and demographic information may be used.

Simplifying information access

Clickshare enables the anonymous tracking of individual users as they jump among unrelated Internet sites, and offers a facility to settle information transactions down to as little as 10 cents. Clickshare requires no special user software and simplifies user access to information by rendering multiple registration at Web sites unnecessary.

"The Interactive Alliance has already brought together so much of the industry in acknowledging common principles, it will make our job easier to bring about publisher cooperation," said Bill Densmore, Newshare's president. "And the CASIE working group principles strike a laudable balance among marketing requirements for a user census, the consumer's need for ease-of-use and democracy's need to assure personal privacy."

CASIE is a joint project of the Association of National Advertisers and the American Association of Advertising Agencies with the support of the Advertising Research Foundation. It seeks to define a universal standard for third-party verification of audience claims by Web publishers which gathers uniform usage data about individual users, while respecting their privacy.

"Audience measurement efforts which adhere to the CASIE principles should help grow interactive media and benefit all those involved, including advertisers, media buyers and sellers," said Judy Black, senior partner and director of the BJK&E Interactive Group and also the chair of the CASIE research subcommittee.

What is the Alliance?

The Interactive Alliance is working to assemble the most comprehensive and definitive ongoing database on worldwide interactive media use. It was formed in 1995 by Next Century Media Inc., and The Arbitron Company. Other consortium members, in addition to Newshare Corp., now include Interse, McCollum Spielman Worldwide and MarketCast.

The Audit Bureau of Circulations and its technical support affiliate, WebTrack, have agreed to be participants in

the work of The Alliance. Representatives of over 40 other industry organizations have agreed to participate as alliance advisors.

"Clickshare and The Interactive Alliance share a philosophy of cooperatively lifting the Interactive lake to raise all ships," noted Bill Harvey, president and CEO, Next Century Media. "It turns out that the Internet, which arose like topsy with no central direction, can become a more valuable business for content providers and advertisers by the same process of decentralized collaboration."

The advertising and publishing industries are struggling to reach a technology and consensus for the measurement and tracking of World Wide Web usage. The Newspaper Association of America has convened a Nov. 14 summit in Dallas so that major publishers and system vendors can discuss audience measurement principles. Newshare is among invited participants in the summit.

About the participants

Newshare Corp. was founded in September 1994 by a veteran publisher, a university technologist and a marketing executive as the Internet's first news brokerage, with a goal of building a free market for digital information among independent publishers and their users. Its first product is Clickshare. Williamstown, Mass.-based Newshare is privately funded.

Next Century Media Inc. is a team of advertising and media-research executives committed to maximizing the effectiveness of Interactive media worldwide for advertisers, agencies, network operators, content providers and consumers. Next Century Media clients include advertisers and agencies collectively representing over \$23 billion in annual advertising investments, plus a large number of network operators.

Arbitron NewMedia, a unit of the Arbitron Company, was established in 1994 to provide a wide range of survey research, consulting and methodological services to the cable, telecommunications, direct broadcast satellite, online and new media industries. The Arbitron Company is a media information firm providing services to broadcasters, advertisers and agencies. The Arbitron Company is a division of Ceridian Corp.

NOTE TO EDITORS:

The Newshare document, "Key Points About Clickshare, CASIE and Audience Measurement," is available at:

<http://www.newshare.com/News/audience.html>

The "CASIE Guiding Principles of Interactive Media Audience" are available at:

<http://www.commercepark.com/AAA/bc/casie/guide.html>

FOR MEDIA INQUIRIES:

Newshare: Press inquiries to Felix Kramer, Marketing Director, (212) 866-4864 <felix@newshare.com>

Other inquiries to Bill Densmore, President, (413) 458-8001 <densmore@newshare.com>

Arbitron NewMedia: Thom Mocarsky, (212) 887-1314.

Next Century Media: Bill Harvey, (914) 255-2222 or (415) 331-0389.

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"Clickshare" is a registered servicemark of
[Clickshare Corporation](#), the Internet's first information
brokerage.



Purchase with [clickshare](#)

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This page (<http://www.clickshare.com/pubpack/releases.html>) last updated 18 March 1996



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Key Points About Clickshare CASIE and Audience Measurement

Clickshare establishes a relationship between World Web Web users and a most-trusted publisher, called the Clickshare Publishing Member. The user registers his name and credit information with this home-base publisher, and all access to Clickshare-enabled content throughout the Internet is then billed to the account the user maintains with his/her home-base publisher.

The home-base publisher, with the user's permission, may use tracking and billing records for demographic and marketing purposes. But under Clickshare, allowing simple, Web-wide access to information does not require a Web-wide names database.

"Within Clickshare, users are known to all publishers merely as a permanently assigned random number," says Bill Densmore, president of Newshare Corp., which developed the Clickshare system. "Only the user's home-base publisher the one place where the user must register is able to match that random number to a real name and real person."

Besides an assurance of privacy, Clickshare gives users simplified, one-password access to distributed information, both free and chargeable.

For content providers whether online services, traditional publishers or new-media enterprises the result is a universal user base and a system for selling small bits of information without shipping sensitive credit-card information across the Internet.

"Anyone who now uses the Internet regularly is familiar with the routine of trying to remember multiple IDs and passwords at differing sites," said Densmore. "Unless we develop an open standard, the situation will get worse as more publishers move to restrict information access to subscribers, members or one-time buyers. Clickshare's unified, free market can replace an increasingly impractical system of multiple passwords and credit relationships. It permits digital information to be independently owned but commonly obtained."

And for advertisers, the result is a system for collecting standardized usage and demographic data for aggregate analysis a way to obtain third-party validation of publisher's claims and make apples-to-apples comparisons of Web sites.

"Clickshare can aggregate user activity at multiple Web sites, giving advertiser's the specific-user information they critically need, yet do so without the threat of unauthorized release of a user's identity," says Densmore.

Densmore, Newshare's president, ticked off the following relevant points about the Clickshare Publishing System:

- No central names database. Clickshare publishers assign a number to each user. But the association of that number to a specific name is known only to the user's home (billing) publisher. There is no Clickshare-wide, central names database. Giving each user an anonymous ID which works across all Clickshare-affiliated sites satisfies CASIE recommendations for user privacy with the ability to measure activity of identifiable, individual users over time.
- Demographic information voluntary and local. At registration, users may voluntarily submit demographic

information about themselves. However, this information never travels beyond their local- or topic-specific home publisher without the user's permission.

- Key information for advertisers. Clickshare makes it possible for hundreds of publishers to collaborate in supplying aggregate, anonymous information about WWW usage at multiple locations. Advertisers can make apples-to-apples comparisons about market reach and effectiveness. This satisfies the CASIE guideline for "total medium measurement."
- Single ID convenient for users. By combining registration, tracking and transactions in a single, distributed approach, Clickshare enables users to buy information at many sites while having to log in only once per session, and maintain a registration at only one site." This satisfies the CASIE guideline for methods which "require the least effort" on the part of consumers.

DIRECT COMPARISONS TO CASIE GUIDELINES

Some other comparisons between the CASIE guidelines and Clickshare, according to Densmore, include:

- CASIE says some interactive advertisers "appear prepared to evaluate these media solely on the basis of leads and sales measures." Accordingly, a system such as Clickshare which combines both tracking and transaction settlement in one data set appears ideal.
- CASIE says "a consensus is emerging that the only way to recoup" investments in new media is "to combine consumer fees with advertiser expenditures." Clickshare leaves the relationship between subscription fees, advertising revenues and per-query charges completely in the hands of publishers.
- CASIE says that third-party measurement "should be taken by objective third-party research suppliers and not by the medium being measured." This suggests that obtaining and analyzing server logs from a publisher does not constitute third-party measurement. Clickshare acquires access records in real time for identified users and stores these records away from the publisher's site where tampering is unlikely.
- CASIE says the party responsible for audience measurement, in order to assure objectivity, should have "no vested interest in the outcome" of measurement data. Clickshare(sm) sells neither hardware nor software and has no vested interest in the success or failure of a particular Web publisher since it is paid based upon transactions, not advertising revenue.

The "CASIE Guiding Principles of Interactive Media Audience," are available at:

<http://www.commercepark.com/AAAA/bc/casie/guide.html>

NEWSHARE QUICK LINKS TO:

[| NEWSHARE/CLICKSHARE CONCEPT](#) | [VISION 1997](#) | [NEWSHARE/CLICKSHARE NEWS](#) | [NEWS TOP](#) | [TOPICS](#) | [WHAT'S NEW](#) | [HOME PAGE](#) | [LEAVE A COMMENT](#)

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EMAIL: mail@newshare.com

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Clickshare Publishers Packet

Attachment H

The files listed below provide a basic introduction to Clickshare. Each linked item is a separate document, and printed out (which we encourage) they come to about 40 pages.

• What is Clickshare?

(NEW) Clickshare intro for users

(NEW) The Clickshare step-by-step workout

Selling and tracking information on the World Wide Web

Clickshare benefits to publishers and advertisers

Clickshare key points

What Clickshare costs publishers

Clickshare FAQ (Frequently Asked Questions -- somewhat out of date) (35K)

Clickshare in the news (index and excerpts) (32K)

• How does Clickshare work?

How Clickshare works (non-technical)

Technical requirements to run Clickshare on your server

(NEW) Sample reports and log files show Clickshare at work

(NEW) Technical FAQ (16K)

• How does a publisher enroll?

Terms of enrollment for Publishing Members

Software license and alpha non-disclosure agreement

• News and people

Clickshare press releases

About Newshare and Clickshare Corp.

Who's who at Clickshare

GO TO:

Clickshare home page / Try Clickshare now /

CONTACTS:

Publishing inquiries to Bill Densmore, Chairman: < corp@clickshare.com >

Press inquiries to Felix Kramer, Marketing Director: < felix@clickshare.com >

Technical inquiries to David M. Oliver, Managing Director-Technology: < dave@clickshare.com >

Phone: (413) 458-8001 or (212) 866-4864

Seventy-five Water Street, Williamstown, MA 01267-0367

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This page (<http://www.clickshare.com/pubpack/index.html>) last updated 24 August 1996

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Terms of enrollment for Clickshare Publishing

Attachment I

Members

A publisher or other owner of copyrighted content must obtain a licensed copy of the Clickshare-enhanced server software. This software is available for free from Clickshare Corp. and may also be bundled with commercial Internet server products. This enhanced server permits user registration and profiling at stand-alone sites.

To use the cross-server validation, third-party auditing (access-tracking) and transaction processing facilities of Clickshare, the publisher must become a member/licensee of the Clickshare system. This enables the receipt of royalty payments for the publisher's copyrighted content accessed by Clickshare-enabled users worldwide -- and the payment of commissions to you when your users purchase content from other Publishing Members. The member/license charges include:

- A one-time member enrollment and system license fee of \$1,995.00.
- An annual fee of \$3 per user the publisher enrolls in the Clickshare system (payable quarterly). These fees will be scaled for publishers with over 10,000 users.
- A maximum transaction fee of 20% for each information purchase executed via the Clickshare system. This fee is charged monthly by Clickshare to the Home Publisher Member of the enabled user and may be applied to the user's account or absorbed by the publisher.

Clickshare system membership also includes:

- The right to link to content of other Clickshare Publishing Members (but not to publish in print form), per the Publishing Member Agreement.
- Support software -- Common gateway interface (CGI) scripts, HTML files and auxiliary programs to assist in the management of your WWW server.
- A 10-25 word factual description of the Publishing Member's copyrighted content at the Newshare Common Resource Center, accompanied by a hypertext "link" that will automatically connect the user to that content, wherever it is located.
- A subscription to the Clickshare-UPDATE email newsletter which provides current-awareness on the interactive marketplace plus a way to exchange ideas with other Publishing Members.

A Clickshare(sm) publisher may optionally apply for membership in the Newshare Service, guaranteeing status as a "preferred link" on Newshare Common Resource Center Topics pages and qualifying the Publishing Member for possible selection as a lead topic-specific or geographic-specific information resource.

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The Clickshare step-by-step workout

The best way to understand Clickshare is to try it-- it's less complicated than explaining it. This page walks you through.

To keep track of where you are, we suggest you keep it open as a separate browser window as you step through the registration and subsequent clicks. If it's easiest for you to print it out, you'll be able to type in the URLs shown -- they all begin with <<http://www.>>.

This page becomes your "jumping off" point three or more times. (You can open a New Web Browser window and then Open Location, copying and pasting in the URL from this page -- or your browser may enable you to do this by holding down your mouse button until you get the chance to open a "New Window With This Link".)

1. TRY to get access to the buy-by-the-click content at the [Clickshare Publishing Members List](#) <clickshare.com/cs/pm-reference.html>.
RESULT: surprise: you weren't allowed in! (Don't take us up YET on the offer at the "authentication required" page to register.)
2. TRY to get pages from our [interim mirror site for The Christian Science Monitor](#) <clickshare.com:8088/>. (Jump off again from here.)
RESULT: Note that there are no live URLs on that page.
3. CLICK on the Test Drive button.
RESULT: now the page reloads with all the links accessible. Though you haven't fully registered with The Monitor, you're now an identified anonymous Test Driver, and you can travel through the site. (NOTICE the Clickshare "token" that is now attached to each URL request that shows in your browser window.)
4. CHECK OUT pages at other Clickshare Publishers that are accessible to Test Drivers. Do that by following links from the Monitor's page rather than from here. Click on the "Breaking News" link at the very bottom of The Monitor's home page; then click on "Other Clickshare Publishers" and go to Studio Briefing or American Reporter. (Warning: SB page is small, AR page can often run over 200K.)
RESULT: as a Test Driver, you can get yesterday's edition (as you will see if you try it, you have to be fully enrolled in Clickshare to see today's chargeable edition -- that's the next step.) You can close the window you've been using to browse as a Test Driver, and "jump off" from here to a new window for the next step.
5. SIGN UP for [Clickshare Registration](#) <newshare.com/cgi-bin/cs-signup> at Newshare Corp. Give your credit card info online or by phone. Make a bookmark to the log-in URL.
RESULT: now you're fully-enabled to access all Clickshare publishers.
6. LOG IN and give your username and password.
RESULT: no more logins needed during this session for any Clickshare site.
7. GO to the paid content via the link on the Welcome Page to "Monitor News Archive (Chargeable Content)." Note that the URLs listed there are divided into value classes.
8. BUY at least one 10 cent and one 25 cent page.
RESULT: you just bought information. (Soon we'll be adding higher-priced pages, and then any charge over a definable threshold will require a confirmation message from the user.)
9. GO back to the Publishers Directory and buy "Today's Edition" at either Studio Briefing or American Reporter -- available only to registered users (not Test Drivers). If you're feeling wealthy, spend 50 cents at the archive of Studio Briefing or 75 cents at the American Reporter archive as well.
RESULT: you will be charged for these pages and they will appear on your session report (see below).

10. WHAT HAVE YOU PROVEN? Both of these publishers are on Clickshare-managed servers, so getting these pages plus the Monitor archive pages (on a server Clickshare has no control over) is a conclusive test of Clickshare. It shows our capability to authenticate users at multiple sites that do not know who you are -- only that you are a current Clickshare user -- and to restrict or allow access to these sites based on your Clickshare status.
11. WAIT FOR EMAIL: early tomorrow you'll receive an email report of your content purchases during today's session.
IF YOU CAN'T WAIT, find a preview of this document at [Sample session report](http://clickshare.com/reports/daysession.html) <clickshare.com/reports/daysession.html>. (You'll see a link there to an explanation of the reports.)
12. WAIT FOR YOUR BILL: at the end of the month, you'll find a credit card charge of \$0.35 or whatever aggregated total of the pages you bought from Newshare Corp. (where you signed up for Clickshare).
IF YOU CAN'T WAIT, see one such document at [Sample end-of-the-month bill](http://clickshare.com/reports/ccmonth.html) <clickshare.com/reports/ccmonth.html>.
13. ON FUTURE VISITS, now that you're signed up, return anytime to [Newshare Welcome Page](http://newshare.com/cs/welcome.html?TVS=login) <newshare.com/cs/welcome.html?TVS=login>.
PLEASE BOOKMARK this starting point to log in at the start of each session.
14. GO OUT AND TELL EVERYONE YOU KNOW, "I have seen the future and it works" -- or, to put it more humbly, tell anyone you know who will get excited by this sort of news that "Clickshare is now the first service offering multisite, distributed user authentication and aggregated micropayments on the Web."

NOTE: if this demo doesn't work for you, or you think it could be explained better, contact Felix Kramer, Marketing Director, felix@clickshare.com.

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*This page (<http://www.clickshare.com/pubpack/steps.html>)
last updated 28 August 1996*



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Selling and tracking information

On the World Wide Web

Identifying the opportunity

Information has value. **But how can publishers realize value from what they put up on the World Wide Web?** Today there are two options: Sell ads, or charge users a single-site subscription.

But now advertisers want to track user visits to target their marketing dollars. And consumers are growing tired of having to register -- and even subscribe -- at multiple sites. The Internet is like TV with no ratings -- or a worldwide phone grid with no universal billing conventions.

The solution? A transaction standard that preserves both copyright and a publisher's direct-to-user relationship -- one which recognizes content, not time online, as the fundamental unit of value.

●The breakthrough

Clickshare (sm) is the breakthrough system that tracks movements and settles charges for digital transactions -- down to as little as 10 cents per query -- as users jump among multiple unrelated sites on the Internet's World Wide Web.

The Clickshare system removes one of the biggest barriers to the Internet's further evolution by enabling users to conveniently buy personalized information at many sites -- while sparing them the hurdles of multiple passwords, registrations and credit relationships.

Clickshare gives **publishers** an economic incentive to cooperate in selling information and exchanging users through royalties and referral commissions -- in particular for units of information of a dime's value or less that may be too small to be cost-effective for traditional payment methods. It also allows **Internet service providers** to participate in revenue streams for information.

Clickshare offers **marketers and advertisers** an improved way to measure Web traffic across multiple unaffiliated servers, correlated (when permitted by users and participating publishers) to demographic information.

●Privacy respected across an open network

Clickshare preserves personal privacy by avoiding any form of centralized names database. Only the user's home-base publisher has records by name of where a user clicks -- and the user can block the use of that information beyond what is required for account billing.

Clickshare requires no special software or hardware for consumers beyond a standard Internet connection and the use of HTTP to obtain digital data -- whether words, sound or pictures. It favors no particular browser; no particular document-formatting standard.

●Clickshare is now

Clickshare is not vaporware. It is running now, on servers managed by Newshare Corp and Clickshare Corp, with pages from two small publishers to demonstrate the cross-site authentication capabilities of the service. Server software will shortly begin shipping to a small cadre of key publishing partners. Full transaction-handling capabilities and an initial base of Publishing Members are expected in the third quarter of 1996.

You may register as an introductory Clickshare-enabled user at no charge. To do so, go to the [Clickshare TRY IT](#) page now. You will be prompted for your name and you'll be asked to create a password. Other information requested is optional.

● Who is behind Clickshare?

Clickshare Corporation is based in Western Massachusetts. The concept and working system come from Bill Densmore, a veteran journalist and newspaper publisher, partnering with David Oliver and Michael Callahan, veteran technologists. (For more, see [Who's who at Clickshare](#)).

We are in negotiation and licensing discussions with publishers, marketing and auditing companies, backbone providers and back-end services, and other key players, with the goal of establishing an open standard for micro-transaction settlements on the Web.

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5 August 1996*



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Clickshare benefits to publishers and

advertisers

An example (taken from the newspaper industry)

Suppose a West Coast newspaper offers access to information on its Web site for a basic monthly fee of \$5, enrolling users and debiting their credit cards monthly. Suppose an East Coast newspaper follows the same marketing practice.

Without Clickshare, a West Coast subscriber who "clicks" to information at the East Coast paper will be refused access unless the user agrees to a second \$5-a-month East Coast enrollment. This is the World Wide Web today -- multiple registrations and enrollments.

With Clickshare running on the servers of both papers, the West Coast user can be "served" information in real time from the East Coast newspaper. Additional charges are aggregated and settled as additional fees to the user's account at the West Coast newspaper.

This system produces simultaneous benefits:

1. **FOR THE USER:** The benefit of a single ID for all Clickshare-enabled information access and settlement to a single billing account. Browser-software independence.
2. **FOR THE WEST COAST PUBLISHER:** An opportunity to provide a gateway to non-owned content at a fellow Clickshare Publishing Member, and a chance to vend to its user information purchased at wholesale but with the ability to profit by applying any form of retail markup (or to vend without fees at all).
3. **FOR THE EAST COAST PUBLISHER:** A way to sell information to an unaffiliated user, be assured of payment, and do so at no incremental cost beyond small transaction fees.
4. **FOR THE ADVERTISER:** Using an audience-measurement vendor who analyzes data acquired through Clickshare, a way to study user movements across Clickshare-enabled web sites that permits apples-to-apples comparisons of marketing effectiveness.

Using Clickshare, Publishing Members can:

JOIN A COMPLETE, DISTRIBUTED, USER-MANAGEMENT SYSTEM. Clickshare is the only transaction and tracking service designed around the greatest strength of the Internet -- the scalability of its distributed architecture. Yet, Clickshare is also the only such service where a user can have a single credit relationship with one publisher, yet be recognized universally as "one user" at multiple sites for both information purchases and tracking. Through cooperation with individual publishers, and given the permission of individual users, this information can be combined with specific demographic data to provide detailed profiling of individual users, subsets of a publisher's user base, or users of a specific demographic profile across all publishers.

PROVIDE TRUE THIRD-PARTY VALIDATION OF WEB USAGE. Other systems rely upon server logs maintained by the publisher. The Clickshare system acquires per-query page-access records in real time and stores them in a central service which cannot be tampered with. Services which claim to validate "hits " by looking at publisher serving logs are applying a loose definition of the term "validate. " In the print publishing world, there are many ways to "test audit " the physical distribution of a newspaper or magazine. Such options are not available when transferring digital information. So the collection and authentication of user activity as it happens becomes crucial.

DIFFERENTIATE EYEBALLS, NOT JUST COUNT THEM. Clickshare users are provided with unique identification numbers which are recorded no matter where they travel for information around the Internet's Clickshare-enabled sites. So a publisher learns not just how many times a page was viewed, but also how many times a particular user viewed that page. Each access record shows the anonymous ID of the user who accessed the page as well as the Publishing Member who "owned " that user. Other "hit counting " implementations can achieve this level of individual-user analysis only by maintaining a huge database of names and addresses -- with all the problems of privacy and scalability that implies.

RESPECT PERSONAL PRIVACY AND RESPECT THE PUBLISHER-SUBSCRIBER RELATIONSHIP. Clickshare Corp. **never** possesses the names or personal demographic information of users. This information is acquired by individual publishers and remains only on their computers (or on computers of a third-party processing house). The Clickshare backend database contains only anonymous user ID numbers. When these are distributed to publishers periodically for billing, only the individual publishers are capable of matching an ID by name to an actual user. It is then up to the publisher, based upon the nature of its relationship with its own users, to decide if and how that information will be used or sold. A publisher who chooses to commercialize its user relationship will have the ability to track in complete detail the site visitation habits of its users. Central to Clickshare's role as an independent, third-party is our avoidance of any involvement in that relationship.

PROVIDE DATA TO OTHER TRACKING SYSTEMS. Clickshare tracking data is acquired and stored in industry-standard database formats that it can be provided to other web-activity tracking services for aggregation. For example, a major advertiser might wish to obtain aggregate "hit " data for its advertisements running on multiple Clickshare-enhanced sites. With Clickshare's open-standards reporting facilities, pages with the advertiser's material can be identified system-wide and a report provided to the advertiser sorted by publishing member or by geographic market area.

EVALUATE ADVERTISING EFFECTIVENESS. Some of the questions which an advertiser could answer with sorted Clickshare data include:

- From which part of the country is interest in our advertising message strongest?
- How does that correlate with sales?
- Which web site shows the most number of "views " of our advertisement per dollar spent?
- What percentage of users from a given site seek product literature?
- Does the same consumer view the ad more than once?
- At what time of day is the ad most likely to be viewed?

Significant additional information about the demographics of particular users who have accessed an advertising message -- and their names -- may be obtained from the home publishers, depending on what information the user has chosen to make available.

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This page (<http://www.clickshare.com/pubpack/benefits.html>) last updated 12 January 1996

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Key points about Clickshare

Key points:

1. **USER CONVENIENCE** -- The user maintains one account relationship and must remember only one password, while retaining unimpeded access to a universe of information -- whether free, by subscription or charged by the page-- from Clickshare-enabled publishers.
2. **PUBLISHER INDEPENDENCE** -- Independent information providers each maintain their own base of customers or subscribers as well as physical control of their copyrighted information. This makes updating, pricing, user tracking and personalization simple and locally based.
3. **ADVERTISING VALIDATION** -- The Clickshare system collects records of visits by specific users to all Clickshare-enabled information, whether print, audio, graphical or software applets, and can provide this sorted, aggregated information to advertisers as a form of third-party validation of publisher viewership claims. However, advertisers may obtain the actual names of Clickshare users only from the user's home publisher (only for individual users who consent to the release of this information).
4. **PERSONAL PRIVACY** -- Sensitive name, address and credit information is stored at the user's home publisher only. This information never traverses the Internet during information-browsing sessions. The Clickshare system knows users only by their home publishing member and a randomly-generated user ID number. There is no central database of user names and only the user's home publisher can associate a name with a user ID.
5. **NO SPECIAL SOFTWARE** -- Standard web-browser software from is all a user needs to enroll at a Clickshare-enabled Web publishing site. And Clickshare works within official standards, thus imposing no proprietary modifications to the Internet environment.
6. **NO CREDIT CARDS ON NET** -- The user's home publishing members acquires credit-card information about the user in whatever fashion is acceptable, from a security standpoint, to the card issuer. Once this information resides securely in a off-line database, the user provides a standard ID and password combination to begin a Clickshare session. Only at settlement time, using an off-line protocol, is it necessary to relate information purchases to the user's credit account. With Clickshare, no credit-card numbers move across the Internet in real time.

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What Clickshare costs publishers

Individual site

A publisher or other owner of copyrighted content must obtain a licensed copy of the Clickshare Publishing Server Software (see [Technical requirements to run Clickshare on your server](#)). This software is available **free** from Clickshare Corp. and may also be bundled with commercial Internet server products. This enhanced server permits user registration and profiling at stand-alone sites.

To use Clickshare's cross-server validation, third-party auditing (access-tracking) and transaction processing facilities, publishers must become members and licensees of the Clickshare Access and Payment System (CAPS). This enables access to our aggregation and settlement service and receipt of royalties for the publisher's copyrighted content accessed by Clickshare-enabled users worldwide. We call such enrolled publishers Clickshare Publishing Members.

This page includes the most recent schedule of prices for Clickshare; it supercedes previous schedules. Until Clickshare begins settling transactions, some of the issues surrounding pricing are not yet finalized

The Publishing Member/license charges include:

- A one-time member enrollment and system license fee of \$1,995.00
- An annual fee of \$3 per user for each user the publisher enrolls in the Clickshare system, payable quarterly, for each of the first 10,000 end-users who register to use Clickshare through their site, with a declining per-user fee schedule above that level. Contact Clickshare Corp. for fees above the first 10,000 users.

Clickshare charges a **transaction fee** of 20% on information exchanges.

The maximum **tracking fee** from Clickshare to Publishing Members who wish to measure Clickshare-enabled access to their information for audience-measurement purposes, but who are not charging for content, is \$0.01 (one cent) per URL accessed as a "clickstream" aggregation fee.

Clickshare Corp. charges no fees directly to end-users. The end-user relationship is the exclusive domain of the Publishing Member who "owns" that user. The user need only enter into a relationship with a Publishing Member and use a standard Web browser.

Multiple Site License

Digital publishing services, rights-management organizations or enterprise network administrators may license the Clickshare Access and Payment Service (CAPS) backend server software to perform user authentication, access tracking and other customizable services which do not generally require authentication across the entire World Wide Web. Pricing of this license starts at \$100,000 plus \$0.25 (25 cents) per enabled user per year and \$0.0025 per "page" (response to a URL request) served, assessed quarterly.

Contact Bill Densmore <densmore@newshare.com> for more details on sublicenses.

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This page (<http://www.clickshare.com/pubpack/pubcosts.html>) last updated 26 April, 1996

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Clickshare frequently asked questions

Q: You call Clickshare a "service," not a network. Why?

A: Clickshare is not a network (implying a physical infrastructure), but rather a network protocol (software) which operates across a physical network employing TCP/IP and HTTP. The Internet is such a network.

Clickshare's protocol provides a suite of services to publishers who adopt it. These include universal, one-ID registration, session-based user validation, user profiling (to support personalization and demographic-data collection) and user-access verification (the latter supporting per-query, per page or per "click" billing).

The Clickshare facility permits owners of proprietary content to offer it via the Internet. Clickshare customers can obtain and pay for it readily; non-Clickshare users will be unable to view the content unless they first enroll and arrange a form of payment.

But as important, Clickshare users are free to use the vast free resources of the Internet seamlessly and even jump back and forth between free and paid resources without difficulty. And Clickshare Publishing Members may provide a mix of chargeable and free content on their web sites -- some of it open to the general Internet user and some open only to Newshare users.

In this sense, Clickshare is not a technology network but a loose affiliation of content providers for billing purposes only. It has been described as a system enabling "billable hypertext links."

Q: Is there anything else out there like Clickshare?

A: Not that we know of. Unlike a relationship with a proprietary network or online service, the Clickshare Publishing Member maintains and controls the primary relationship with the end-user as well as the look and feel of content provided. Clickshare's role is as a back-end authentication and payment facilitator and -- at the Publishing Member's option -- as a context-provider for Newshare-enabled content of other unrelated Publishing Members. This later service is provided by the Newshare Syndicate.

Q: How much does it cost for a content provider to become a part of the Clickshare system?

A: Regardless of size, there is a one-time membership fee of \$1,995 for Clickshare publishing membership. With membership comes a free license to use Clickshare-enhanced server software for user registration. This fee may be paid upon enrollment or it may be debited from the Publishing Member's clearing account as a percentage of ongoing royalty payments. The Publisher Member is also charged a fee of \$3 per year, payable quarterly, for each of the first 10,000 end-users who register to use Clickshare through their site (with a declining per-user fee schedule above that level). That fee may also be financed via "clickstream" royalties or commissions otherwise due Publishing Member. This per-user fee is required to finance the scaling-up of technical facilities, which depends on the total number of users in the Clickshare "universe." A Publisher with 100,000 users puts more "load" on the system than one with 100 users.

Q: How does Clickshare Corp. make money on an ongoing basis?

A: The contract between Clickshare and each Publishing Member permits Clickshare to deduct a transaction fee from the value of each unit of "clicked" information handled by the Clickshare service. This fee, like a

commission, will equal 20% of the transaction amount.

Q: Exactly how is a consumer user charged for his reading, viewing or listening?

A: Clickshare is WWW-based. A user clicks to the home page of his or her Publishing Member, which might be a newspaper, a trade publisher or an Internet service provider. The user's Home Publisher may "serve" up a generic home page to all its users, or it may construct, on the fly, custom home pages for each individual member.

Publishing Members operate an Internet server equipped with the Clickshare- enhanced, UNIX-based httpd server. The user requesting a page from anywhere in the Internet universe gets it back without intervention. If it is content of another Clickshare Publishing Member, a record of the request is made in background. If the page is priced above specified levels, the user may be prompted before receiving it.

For users who are paying on a flat (subscription) basis, at the end of the month, the user's access is totaled and if the value of "clicks" exceeds the basic monthly fee to the Home Publisher, the user is billed. If it is less, the user pays only a basic fee set by the Publishing Member. The only billing and payment relationship at the consumer level is between the Publishing Member and the user.

The Publishing Member draws from or pays into a clearing account at the Clickshare corporate/technical level equal to the sum of the Publishing Member's user-member clicks -- offset against any original content that the Publishing Member has "served" to the global Clickshare system. This could be a net positive or negative number for the Publishing Member, depending how active a supplier of content the Publishing Member is. If it is positive, the Publishing Member doesn't have to charge its users a very high monthly fee to make money. If it is negative, the Publishing Member may need to raise the subscription fees.

Q: When will the Clickshare service provide billable hypertext links?

A: Our Clickshare server software is now in alpha testing, and micro-transaction settlements will be enabled within the first few months of 1996. To use the Clickshare system, the Publishing Member's Internet server must run the Clickshare server software. This is available from Clickshare Corp. based on widely used public-domain server technology. The Clickshare-enhanced HTTPD server runs on Silicon Graphics IRIX, Sun Microsystems "SunOS 4.1.3" and "Solaris", and Linux. IS THIS UP TO DATE? Providers with other Unix variants should contact us for information. We are in discussions with other server-software vendors to license and incorporate the Clickshare code.

Q: You have said that the Clickshare-enhanced server software is free under license. What is the \$1,995 charge for?

A: The \$1,995 is the current one-time fee for a content provider to access the Clickshare micro-transaction settlement system as a new Publishing Member. The fee opens access to the Clickshare system for all of the publisher's home-base users who have registered as Clickshare users. They do this with their home-base publisher. For beta-stage Publishing Members, the interim fee is \$100 until the transaction-clearance system begins functioning.

The \$1,995 one-time license fee does not have to be paid in a lump sum. It may be paid through a withholding of a percentage of royalty payments to the Publishing Member for "clicks" to its charged content. In this way, the Publishing Member pays nothing for the service until it begins to produce revenue.

The \$1,995 fee is uniform for all sizes of Publishing Member. Those with broader, more popular content will benefit more than those with narrow, limited-interest content. Because Clickshare's form of compensation is a transaction fee which is a percentage of "click fees," Clickshare ultimately makes money when content

providers sell content. That creates an incentive for Clickshare Corp. to help its members to sell content. It is a classic broker relationship.

Q: Are there any other fees?

A: Yes. Publishing Members are assessed an annual fee of \$3 per user enabled. This fee is payable at the end of each quarter and is based upon the number of enabled users at the end of the period. This fee equitably spreads the technology costs of processing transactions between large publishers and small publishers.

Q: How do publishers provide content via Clickshare Corp.?

It is a misconception to think of the Publishing Member as providing content to Clickshare. We expect our Publishing Members to maintain their own content on their own Internet server (or one they purchase space on). Clickshare Corp. does two things:

- Through the Clickshare server software, we enable the content provider to track and receive royalties from users who click on content pages; and,
- At the Publishing Member's option, we provide links to the Publishing Member's content via the Newshare Syndicate service, run by Newshare Corp, parent corporation to Clickshare.

The Publishing Member retains original copyright to its own original material. The Publishing Member also grants a limited license to Newshare to create links to that content and a license to other Clickshare Publishing Members to reference and broker the sale of that content to their members at a price set by the originating Publishing Member. Clickshare makes money only when the Publishing Member sells content. In this fashion, Clickshare preserves the independence of publishers, shoulders a share of the financial risks, yet establishes a framework for sharing of information and users among publishers.

Q: What amount will the per-access User fees be, and how much will the originating publisher get?

The Clickshare system will at the outset permit 16 different pricing levels, but provides the technical capacity for thousands of pricing levels. We expect that these will range from as little as a few pennies per page for low-value-added, "commodity" to several dollars per page for exclusive, time-sensitive material. Our strategy is to keep page costs very low and broker information for which this is an appropriate price. Clickshare is capable of completing transactions for the purchase of software applets (Java programs for instance) and off-line products, as well.

Q: Do users get to approve each information purchase?

A: The Clickshare concept is for users to access content without having to decide before each "click" whether they can afford it. The Publishing Member sets the price of a page being served. The Publishing Member has complete flexibility in its agreement with users to set a price above which there will be an "approval screen" displayed before information is purchased. We anticipate that most users will commonly agree to be served information without per-item approval if the price is in the range of 10 cents or less. There is little market research on this topic as it has never been feasible to sell information "by the click" at such a low fee.

Q: Do Publishing Members have the right to download and publish Clickshare-enabled materials?

A: Absolutely no. Not if you mean "publish" in the conventional sense of the printed page. Clickshare's service is not intended to handle royalty settlement for conventional print publishing. It is intended to automate the systematic use of copyrighted material on a one-time, non-commercial basis by individuals. For example, if a newspaper wishes to print a piece of Clickshare-enabled content, it must obtain copyright in a conventional fashion from the original owner. We might facilitate this process manually as a service and we intend to be compatible with variety of "ecash" payment systems which could be used to pay for print publication rights.

Q: Then what does Clickshare charge for?

A: The Clickshare system will charge the clearing account of a Publishing Member whose consumer user "clicks to" World Wide Web-accessible content. The charge is determined by the copyright-owner of the content used and is for one-time, personal use.

Q: How is the user "billed" for the reading or other use of Clickshare-enabled materials?

Records of these accesses and charges will be provided by the Clickshare service to the Publishing Member's server machine on a periodic basis, possibly as often as daily. The Publishing Member may take this data and feed it to whatever billing engine it wishes to use to bill its own members. However, we expect to recommend approved vendors for this service and we may ourselves offer a billing facility.

In keeping with our strategic goal of maintaining minimal proprietary roadblocks to the Clickshare service and inviting value-added services from other vendors, we are not specifying a billing facility. We will provide the date required to perform billing and will perform billing as an optional service upon request.

Q: What is the difference between Clickshare and Newshare?

Newshare is an editorial system for exchanging local- and topic-specific news among licensed Publishing Members and their affiliated users. Clickshare is a technology system which makes concepts such as Newshare economically feasible on a broad scale. Clickshare can be used for exchange of any information (not just news) which can be formatted for acquisition "by the click" via the World Wide Web.

Newshare Corp. intends to award geographic-specific or topic-specific exclusivity to Publishing Members in exchange for their use of the Newshare name in their service. Such publishers must follow Newshare's Customer Service Objectives (CSO) and the exclusivity agreement is renewed after a specified period.

Use of the Clickshare service, which, much like any other form of common carriage, is open to any content producer willing to purchase a license to use it.

Q: Will Publishing Members who join the Clickshare system have to also rename their digital publications to include the Clickshare brand in the title?

A: No, unless they wish to be designated as a Newshare lead topic- or geographic-specific partner. We believe that information consumers rely upon a recognizable brand to assure them of ease-of-use, quality and accuracy. The phrase "newshare" conveys more precisely than any existing word the concept our service enables. Since the objective is to attract the most number of users to Clickshare-enabled content as opposed to some other service's content, a long history of consumer marketing in the free world suggests they way to do this is with a recognizable brand. That is Newshare, a registered servicemark of Newshare Corp. However, many publishers may prefer to maintain their own brand's identity and will therefore use only the Clickshare technology.

Q: Will Publishing Members be under any obligation to link their consumer users to the content of the Newshare Syndicate or other Publishing Members?

A: Not at all. However, a publisher who wishes to obtain additional revenue at no incremental cost would be well advised to "send" its users to Newshare and fellow Publishing Members for content it does not provide locally or topically. Then when its users "click" on fellow member content, they (the originating Publishing Member) receive a referral fee for enabling that "click."

Q: So the only content benefit to publishers is having access to material to use, which may or may not meet their needs or standards?

A: The aim of Newshare is not primarily to provide content for traditional publishing; it is to provide a reliable, one-stop resource (and more particularly a one bill resource) for consumers to find and obtain topic- and geographic-specific, time-sensitive information via the Internet. Clickshare and its Publishing Members enable this process, and are financially rewarded as a result, through royalties on their own works and commissions for the sale to their users of other publishers' works.

Q: Will you guarantee the accuracy of reports?

A: We cannot guarantee the accuracy of the copyrighted content of Clickshare Publishing Members any more than a newspaper can guarantee the accuracy of the work of all of its news staff. Newshare Publishing Members will be contractually obligated to meet a set of Customer Service Objectives, which will include measurements of accuracy of their content. Publishing Members who do not meet these objective standards will not receive extended contracts in Newshare membership, although they will continue to be permitted to use the Clickshare technical service.

Q: Who is among Clickshare's Publishing Members?

A: We have not begun to formally enroll or announce our Publishing Members. In pre-marketing exchanges, dozens of content providers have already expressed interest in participating in the Clickshare. See the Clickshare press releases (index) for the latest information on this.

Q: I have heard that the major online services -- America Online and Prodigy in particular -- have adopted the practice of storing Web pages of Internet publishers within their own "firewalls" and then serving their millions of users by accessing those "copies" of the real pages. What is the copyright status of this practice?

A: Prodigy and America Online "cache" popular Internet website pages on their own servers to provide better speed and reliability to its members. Some legal experts argue that making a digital copy of a document from the Internet, then providing it to hundreds of other users without notifying the originator violates copyright law. But this theory has not been tested in court yet.

Q: Will widespread "caching" of web pages interfere with the operation of the Clickshare system?

A: Yes and no. Absent secondary technology or service arrangements with the major services, it would make it impossible to track every click to copyrighted content. But the contract governing admission to the Clickshare system should take care of this problem administratively.

Here's how: For Prodigy or AOL to access a chargeable Clickshare-enabled page in the first place, they will have to be at minimum a technical member of Clickshare. We are in discussion on these subjects with the online services. And the contractual agreement we expect they will sign with Clickshare Corp. will be worded to make grabbing pages for caching a violation of the one-time, personal-use-only agreement -- unless the service also proxies the compensation structure as well.

The online service will employ a Clickshare-like structure to track access by its own users to pages cached from the Clickshare system and will provide to Clickshare individual records of each access for billing. In fact, the online services already have sophisticated systems for tracking the activities of individual users within their closed "universes."

Q: How many "clicks" equals one piece of content. Are all pieces of content valued equally for this purpose?

A: "Click" is shorthand for a Universal Resource Locator (URL) request in HTTP format. Most Clickshare

users access information by the "click" of a mouse. One click of the mouse is one page of HTTP material. This turns out to be a highly flexible way of charging for information, both from the user and publisher perspective. Using Clickshare, the publisher can supply text, graphics, sound or software in response to a user's URL request. And the publisher can apply free-market principles in determining how much information to supply in response to a click and what it should cost.

The Clickshare user makes informed judgements about which information to "click" on based upon its value in terms of price, length or format. When the price is right, the user makes a purchase.

Early application of the Clickshare system will establish a "market" for the value of typical information sought. We expect that most publishers will offer to supply many resources for prices in the range of 10- to 25-cents and that users will "click" on such content without specific approval required for each purchase. On the otherhand, the Clickshare system will mandate user approval for purchases at higher rates. But the thresholds will be determined by the users and publishers when service is established and can be more or less infinitely customized.

Our expectation is that this will create a self-regulating mechanism for content providers to regulate pricing by the size of the page served; and for users to make content-purchase decisions on the same basis. If they find a content provider serves up minimal pages for 25 cents a pop, they won't click back again.

Q: What about charging different prices to different users and for different types of information?

A: No problem. Embedded in the Clickshare system is the ability to delineate "page classes" which have different retail values. This permits a Publishing Member, for example, to have "tiers" of service. One tier might be free content open to the public. The next "tier" might be content open at no charge solely to Clickshare enabled users. Another "tier" might be open to the Publisher Member's own local users for a monthly flat subscription fee -- and charged "by the click" to remote Clickshare users. And a final tier might be charged to all users, but at a different price depending whether the user is local or remote. Since the Clickshare server can identify the "class" of an incoming user, it can price-differentiate its service to that user.

Q: A number of companies are proposing to establish "e-cash" systems which charge Internet purchases to credit cards. What sets Clickshare apart -- and how can Clickshare be more economical than a credit-card transaction?

A: Clickshare is intended to work underneath and in collaboration with ecash and credit-card implementations. It is a compatible technology which is not hooked to any specific e-cash implementation; it can work with all of them.

As a consumer, you may not realize that each time you use your credit card, the business selling you a good or service is usually paying at least 25 cents plus 2% of your purchase for the privilege of getting paid by the credit-card issuer. While that is a trivial piece of major transactions, it renders small exchanges prohibitively expensive. One reason for the 25-cent base fee is that credit-card authorizations must usually travel across conventional telephone circuits, resulting in unavoidably high cost.

Clickshare, on the other hand, operates across the Internet, where the cost of carriage of information is not presently charged "a la carte." as with the phone system. The Internet's TCP/IP protocol is very efficient at moving tiny parcels of digital information compared with traditional telephone lines. Taking advantage of this, Clickshare is designed to bundle dozens or even hundreds of individual information purchases during a monthly span and then obtain the online consumer's approval to charge them in bulk via a credit-card network once per month. Only then does the credit-card transaction have to go out on the traditional phone network. This results in a single credit-card transaction fee of 25 cents spread among many individual transactions and hence a highly efficient method of charging for information access.

Clickshare will charge a 20% transaction fee to the buyers of information. This fee will actually be charged to an intermediary -- the Clickshare user's home Publishing Member -- who will apply it to the user's account.

With credit-card processors typically charging 25 cents per transaction and 1.5- 2% of the total charge, you can see that Clickshare at the outset will always be cheaper than a direct credit-card charge for purchases of around \$2.00 or less. We anticipate the Clickshare system will be able to aggregate and clear transactions to the credit-card networks efficiently enough to be able to lower the 20% charge for higher-amount transactions.

Q: You seem to be positioning Clickshare as the "pay per click" service. But don't consumers have an aversion to paying for things on a nickel-and-dime basis?

A: While Clickshare does enable payment "by the click," we anticipate that most publishers will still elect to provide their home-base users with a suite of information on a monthly subscription or "bulk" basis. However, any universal system of digital information exchange will have to value information "by the click" and provide for background settlement among publishers "by the click" if it is to function in a practical sense.

In most other media -- the telephone and cable networks come immediately to mind -- there are a variety of charging mechanisms and marketing strategies. But information is not like a sack of flour, a commodity where each grain is identical to the next. So it is not logical to think that it will be sold that way so long as there is another way to sell it.

In addition, whether consumers will resist paying for information when its value is measured in pennies rather than dimes or quarters is not yet documented, since prior to Clickshare and the Internet there was no economical way to sell information in that price range on a point-to-point, rather than broadcast, basis.

Finally, it is very well documented that specialized consumers will happily "pay per query" for some types of information. Examples include some types of business and professional information, exclusive and analytical reports and information in some way personalized to the consumer's interests.

Q: How would a publisher use Clickshare and not charge its subscribers "by the click"?

A: Clickshare works in background to "transport" information about the value of a page access between the publisher (who gets a royalty), the referring Home Publisher of the user (who gets a referral commission, sort of like being paid for creating a link). Whether the user's Home Publisher bills that user per-click is another story. What has to happen for the system to function is that the content-originator gets a royalty-by-the-click and the referring publisher gets a commission-by-the-click.

A newspaper Publisher might decide that its Clickshare-enabled users can get all-the-can-eat surfing of Clickshare resources costing less than 50 cents per click for a flat fee of \$15 a month on top of their basic \$4.95 charge. Then the publisher would do a calculus to make sure that on average the extra \$15 would cover the typical surfing charges. Maybe they would figure they would be paying out royalties and our transaction fees adding up to an average of \$13 a month, so they pocket \$2 per user.

In this scenario, the user has purchased "bulk access" to Clickshare resources, so should be free of that sense of paying "by the click."

This is the way we use telephone service, in some respects. Some telcos offer "metered" local service, but give you a preset amount of "message units" per month which you "use or lose." Clickshare could operate the same way. Our point is that these are marketing considerations for a local- or topic-specific Publishing Member, not for Clickshare Corp. Our entire strategy is based upon empowering the publisher to control the user relationship.

Q: It is unclear to me after reading your web site's materials whether one must log in (enter password) for each web site visited.

A: No. And that is one of the key consumer-friendly features of Clickshare. The system allows you to maintain one registration that provides access to any publisher in the "Clickshare universe" of publishers. You log in once, at your Home Publisher (the place you choose to have your credit relationship), who authenticates you. This begins a "session". From that point, for some determined time, you can get information from any other Clickshare-enabled site (and you're never prevented from getting information from a non-enabled site) without having to re-authenticate at every "front door".

Q: When a publisher's own user requests a page of information from that Publishing Member's local Clickshare-enabled server, are either the user or the publisher charged by Clickshare?

A: This is not a quick answer.

First, there are three types of content available on a Clickshare-enabled server:

- Content not being tracked by the Clickshare system. We don't care how or if you are selling this.
- Content being tracked by the Clickshare system but for which no "per-query" amount is being charged. We call this Page Class Level 0 for no charge. If we are tracking it, we will charge 1 cent per access (Because we have to have funds to support and make money on our back end which is handling all the validation and clearance). It doesn't matter whether the Clickshare-enabled user is remote or local.
- Content being track by the Clickshare system for which a "per-query" amount IS being charged. We get 20%, period.

If you don't want to pay 20% to sell your own content to your own users, you can do one of two things:

- Sell it "all you can eat" (by subscription) so that all you are charged by us is one cent per access.
- Run it outside the Clickshare system for your local users and run it inside the Clickshare system for remote users. In this way, you will get no information (at least from Clickshare) about what your own users are looking at, and your own users will not be able to access content at other sites, potentially giving you a 35% referral commission each time they do.

Q: In a sense, isn't the Internet today like the U.S. telephone system just after the turn of the century?

A: Yes. Think of the Internet protocol -- the language computers speak across the Internet -- as a common transfer mechanism for data much as copper wires were a common transfer mechanism for voice in 1911. Everyone knew how to string to wires and make a phone connection after Alexander Graham Bell. But then how did you link together all those wires in a seamless grid such as we have today? And especially, how did you bill for all those calls that went from local telco to local telco to local "telco"?

In that era the answer was that the small companies first affiliated with the Bell System as franchisees and eventually were bought up and combined into AT&T. AT&T then developed a billing "standard" which by the 1960s made obsolete the need to have operators take billing information for a long-distance call. Ultimately AT&T was broken up, but the billing "standards" remain among AT&T, Sprint, MCI and the Baby Bells. Thus you can direct-dial a call across many networks and have the charges show up on one bill at the end of the month.

So Internet protocol for transferring information is like the copper wires. But like the early days of the phone system, no one has adopted, or even proposed prior to Clickshare, a billing standard for the transfer of information on the Internet measured other than by time or by bulk subscription. We believe Clickshare may emerge as such a standard.

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This page (<http://www.clickshare.com/pubpack/clickfaq.html>) last updated 22 Mrch 1996

Newshare®



Clickshare in the News

Purchase with **clickshare**

(See also [Recent Clickshare press releases](#). For an archive of older Clickshare press releases as well as **current speeches**, see [Clickshare/Newshare Information Center](#).)

Click on any article (most recent ones first) to get to that clip.

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[The New York Times CyberTimes Extra/Jamie Murphy and Ed Forrest](#): Who's doing all this measuring?
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Micropayment Venture Pushes Centralized Billing

Excerpts from an article by Bill Roberts in the June 17, 1996 issue of [Web Week](#). Here's where the original of [this article](#) can be found.

Look ahead six months. Dozens of Web sites are charging subscription fees, and more are joining them every day. Pay-per-view emerges as the standard way to subsidize content, and surfers pay every time they hit the water.

Now consider this: Would this reality be more palatable if the audience could pay a central billing entity instead of getting a bill from a dozen different marketers? ...

Steve Outing, an Internet publishing consultant and president of Planetary News in Boulder, Colo., said, "Clickshare raises the bar and gives newspapers a lot more options about how to bring in new revenue. Until now the best you could do was a subscription model." ...

Bill Harvey, vice chairman of Next Century Media Inc., a Sausalito, Calif.-based interactive media consulting, measurement and tracking firm, added that "Clickshare starts with the philosophy that you can get some money from the consumer as long as you keep the price per page quite low, 10 cents or a quarter. You have to have a three-legged stool to make money--online shopping, ads and consumer subscriptions. Clickshare seems to understand this better than anyone else. I think they're going to succeed, but it has to be tested." ...

The Monitor expects to test a pay-per-piece model for its voluminous archive, said David Creagh, the Monitor's electronic publishing manager. "We adopted it because we think they have the most sophisticated technology we've seen for raw audience data--who goes where for what," he said. "We're going to need that but don't know

how we'll use it." ...

Jonathan Roosevelt, an associate at Battery Ventures in Boston who specializes in Internet ventures, finds the Clickshare model intriguing. "They have a fantastic technology. It really is sophisticated, neat stuff. I'm not sure that they're applying it in the best way," he said. ...

But with all the free content, do Web users want to pay at all? Consultant Outing isn't sure. "The difficult part for magazine publishers and newspapers is figuring out what people are willing to pay even for a few pages," he said. "As people see more of that, it will become more accepted, but initially that will be tough going. Paying for archive access is a no-brainer."

Creagh believes people will pay. Earlier this year the Monitor put up a Bosnia site. When Creagh later asked 2,500 site visitors if and how they'd be willing to pay, more than half were game for a micropayment system like Clickshare.

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Who's doing all this measuring?

Excerpts from an article by Jamie Murphy and Ed Forrester in the May 26, 1996 issue of The New York Times CyberTimes daily. Here's where the original of [this article](#) can be found (if you're a registered subscriber).

A number of companies now are trying to bring some calm to the seeming madness of measuring traffic on World Wide Web sites -- and on the banners advertisers pay to place on those sites -- though each has its own view of how and what to measure....

Devising more accurate and efficient methods of a Web site's popularity among Internet users is a battle that's just now beginning....

Once a user is registered with Clickshare, for example, he or she can surf from Clickshare site to Clickshare site without having to re-register at each stop. Clickshare registrants can also use their account with the company to pay what they owe on any Web purchase....

Currently, the Christian Science Monitor, American Reporter, and Studio Briefing use the Clickshare system.

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Pay-Per-Click: The Next Great Online Revenue Stream?

Excerpts from an article by Steve Outing in the May 8-9, 1996 online issue of Stop the Presses!, the Newspaper New Media News & Analysis column hosted by Editor and Publisher. Here's where the original of [this article](#) can be found.

In recent conference presentations, I've been telling my audiences that the model that makes the most sense for newspapers operating on the Internet right now is to give as much away free as possible, and concentrate on attracting advertisers because they will carry most of the weight in supporting newspaper Web operations in the future. Densmore's pay-per-click strategy actually fits in well with this advice, in that pay-per-click allows a

publisher to charge potentially small amounts (microtransactions) for premium content that is worth paying for from the consumer perspective.

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How Java Can Pay the Rent

Excerpts from an article by Robert Hummel on page 42 of the June, 1996 issue of Byte magazine. (This article is not yet online).

Felix Kramer, marketing director at Clickshare (Williamstown, MA), another company that's exploring the field of electronic commerce, sees this as one of the functions of the Web distributor. "People are going to deposit their applets at payware sites on the Web," he explains. "Other people will collect the fees for them and send them a monthly check."

Kramer envisions a billing model for applet use based on data transferred, not on time used. Each download of an applet might cost a few cents or dollars but would allow the use of an applet during an entire session. The alternative, in which the applet might be equipped with a built-in expiration timer, interrupting your application to demand another nickel, is not as likely to occur. "The Internet is a stateless system," Kramer says. "Time as a method of measurement will go away."

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Monitor Monitored by Clickshare

Excerpts from an article by John Evan Frook in the May 7, 1996 online issue of Interactive Age, published by CMP. Here's where the original of [this article](#) can be found.

The Christian Science Monitor plans to include 15 years of newspaper archives at its soon-to-debut Web site. The venerable paper also announced it has picked Clickshare Corp. to provide traffic measurement and microtransaction strategies for the site. The Monitor's endorsement is a major boost for Clickshare, which has been one of the least hyped of the Web traffic measurement companies to date.

Monitor electronic publishing manager Dave Creagh said Clickshare will be used to measure repeat visitors to the site. He said the determining factor in selecting Clickshare was the firm's ability to track unique users without requiring on-site registration and password access.

"(Clickshare's) technology to track visitors, including time spent per visit, is the most sophisticated we've seen," said Creagh. He added that Clickshare's willingness to work with third-party auditors, such as NetCount and I/Pro, also factored in the decision. "We feel that Clickshare will soon set the standard for allowing transaction-based pricing on the Internet."

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Christian Science Monitor To Launch Web Site, E-Mail Service

Excerpts from an article by Laurie Peterson in the May 6, 1996 online issue of [Media Daily: Internet Information](#), published by Cowles/SIMBA. Here's where the original of [this article](#) can be found.

The Christian Science Monitor will unveil a new Web site in two weeks that features a 15-year searchable archive, 24-hour real time audio newscasts from Monitor radio and a crossword puzzle with two levels of difficulty -- one of which lets you cheat a little.

The Electronic Edition of The Christian Science Monitor at <http://www.csmonitor.com> will be free to users through the summer, according to Dave Creagh, electronic publishing manager. Some areas will require registration. Two pricing models will be tested this fall -- a monthly subscription rate of about \$6 for unlimited access and a transaction-based plan that would charge, say, 10 cents to view a political cartoon. ...

The Web site will employ Clickshare Access and Payment Service software to track usage. The software gives users a "digital calling card" so they can log in once and charge purchases at many Web sites to a single account. It also tracks visits to advertiser-supported pages.

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Clickshare eyes web, sees possible profit in pay-to-use browsing

Excerpts from an article by Pam Derringer in the April 8-9, 1996 issue of [Mass High Tech](#), New England's High Technology newspaper. Here's where the original of [this article](#) can be found.

A Massachusetts-based "virtual company" with a handful of employees scattered across the country is betting that the practice of paying for information on the Web will become as accepted as the once-preposterous notion of paying to watch TV....

...Clickshare's future is bright, despite the rise of companies such as Open Market in Cambridge that are also beginning to form business networks. But Open Market collects user/payer information and stores it in one location, Densmore said. Unlike Open Market, Clickshare's user data will be decentralized among the network of affiliated publishers, with each user giving information to a publisher they trust rather than to a large centralized database with which they have no contact, he said.

Densmore is unfazed by prospective rivals.

"The numbers are so huge now that nobody is competing with anybody," Densmore said. "There is enough business for everybody at this stage."

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Web publishing: is fortune really just a click away?

Excerpts from an article by Cynthia Kurkowski in the April 16, 1996 issue of [Webster -- The Cyberspace Surfer](#) online newsletter. Here's where the original of [this article](#) can be found (if you're a registered subscriber).

The ability to support microtransactions -- purchases under a dollar -- across the Internet promises to drive the sale of information on the World Wide Web. Publishers and authors will be able to sale their works by the

article or chapter, or quotable text for that matter. Suddenly, publication archives will become a new revenue source -- not just supported by Web advertising banners, but supported by user purchases of information. Ten cents here, a dollar there, it all adds up to big revenue gains. Revenue publishers might otherwise never have generated under the traditional subscription or newsstand model...

One secure microtransaction system developed by Clickshare Corp., is being tested this spring. (See WEBster article "[Clickshare Begins Trials of Clickshare Access & Payment System](#)" 04.02.96.) With the exception of the initial user registration which must be conducted offline, the Clickshare Service operates online, verifying users, tracking user purchases and delivering user activity reports to its publishers for billing and collection....

"Clickshare provides another model for supporting the sites," said Felix Kramer, president of Kramer Communications and spokesperson for Clickshare. "Sites will get some revenue by casual clickers."

The Unix-based Clickshare Service is in its initial phase of testing by publishers Studio Briefing and American Reporter. Both publishers are looking for a secure payment system which allows them to sale their wares for under a dollar while still supporting high-priced purchases. Clickshare's flexible pricing model attracted the online daily American Reporter. The American Reporter is marketing dailies in two formats: an all-in-one newsstand price and per-article rate ranging from \$1 to \$30. The Clickshare system can deal with the complexities of such a variable pricing structure with its unlimited pricing levels.

[from the issue's table of contents:]

But will the model catch on? It may all come down to pricing.

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Self-Publishing Opportunities on the Internet

Newshare: a new opportunity for nonfiction writers

Excerpts from an article by Durant Imboden, author of the "Putting the Net to Work" column in the April 1996 issue of **Boardwatch** magazine. Here's where the original of [this article](#) can be found.

News reporters are another group of writers who hope to make money on the Web. Newshare Corporation is an online syndicate that expects to help freelancers and publishers earn revenues from worldwide dissemination of their work.

"We gather the work of content providers like newspapers, broadcasters and independent writers and artists," the company explains in its recruiting pitch. "Then we make it possible for each of these providers to share their content with their own customers, subscribers and users all under a single system of validation, tracking and payment."

....Right now, Newshare's content is being offered free of charge, so it's impossible to guess how successful the concept will be when billing starts in mid-1996. To draw your own conclusions, and to see what kinds of content providers the "Clickshare" service attracts, keep an eye on <http://www.newshare.com>.

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Clickshare adopts pay-as-you-surf plan

Excerpts from an article by Jim Kerstetter appearing in the March 25, 1996 PC Week, published by Ziff-Davis. This article is no longer online.

Clickshare Corp. has developed software that gives World-Wide Web site publishers a way to charge users based on their activity.

The Williamstown, Mass., startup's Access and Payment System uses a "digital calling card" process in which users establish a line of credit with the site simply by phoning the publisher. Clickshare's Web server application is then initiated when a user re-enters a site.

The system keeps track of a user's activity on the site, with each page having its own price. The lowest per-hit cost that Clickshare can afford is about 10 cents, company officials said.

Some users, although pleased by the technology, said they hope the base fee will drop.

"I think the system should be flexible enough to charge pennies," said Joe Shea, editor in chief of the Internet magazine American Reporter, in Hollywood, Calif. Shea is one of two users currently testing Clickshare's Access and Payment System software.

...Clickshare's Access and Payment System is now available for Digital Equipment Corp.'s Alpha servers running Unix and Intel Corp.-based machines running Unix. Other platforms will follow this year, officials said.

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Clickshare collects for online pubs

Exrpts from an article by Rose Aguilar published March 18, 1996 in C|Net News. Here's where the original of [this article](#) may still be found.

Technology trials have started for a new Internet payment system from Clickshare that will make it easier to pay for online subscriptions.

Called the Clickshare Access and Payment System, the technology lets users bill charges from several online content publishers to a single billing account. ...

For users, the attraction is that they won't have to use their credit cards for small transactions, nor will they have to give their credit card numbers to multiple vendors to sign up for multiple online publications...

The catch is that the publisher must also have signed up for the Clickshare service. But the company hopes that publishers will be attracted to the service because it will make it easier to track customer billing, count the number of times a user views a given site, and monitor visits to advertiser-supported pages.

Two publishers are participating in the tests: Studio Briefing, a daily entertainment industry newsletter, and American Reporter, an online news daily.

The registration at Clickshare provides users with a single ID and password account and a list of publishers using the service. The system also supports authentication for intranets, officials said.

Clickshare is a privately held spin-off of Newshare Corp.

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Clickshare Internet Publishing Scheme Looks Promising

Excerpts from an article published September 18, 1995 in **Stop The Presses**, published five-days a week by Steve Outing, Planetary News LLC, and owner of the online-news and online-newspaper mailing lists. The column, found at [STP archive](#), is sponsored by *Editor & Publisher* magazine. Here's where the original of [this article](#) may still be found.

....The Clickshare system monitors and collects data on where the consumer has visited and purchased information, then sends the data back to the home publisher and the remote publisher. The remote publisher receives his share of the sale, the local publisher keeps a slice in compensation for the referral, and Newshare keeps a portion. And the participating publishers receive a detailed accounting of what consumers are reading, which can serve to provide advertisers with a verified account of online viewership.

The Clickshare concept has some wise thinking behind it. President Bill Densmore, a former newspaper publisher, has designed Clickshare as an open system supporting Internet standards. Consumers can use Clickshare with any Web browser software. It makes purchasing data on the Web simple; the consumer gets only one bill no matter where in the world she has purchased information. And a single password works everywhere. Credit card information is not transmitted over the Internet; rather, that data is kept solely by the local publisher. Consumers are kept track of by an alphanumeric ID number that is discernable only by the local publisher.

....Clickshare as a concept has a lot going for it. It would allow newspaper publishers worldwide to put price tags on their premium data online -- say, access to their electronic archive -- and easily permit anyone on the Internet to buy it without having to submit a credit card number.

This idealistic vision of Internet publishing commerce is predicated, of course, on Newshare signing up a critical mass of publishers to be part of the Clickshare network. That's going to be its biggest challenge, especially since Newshare is a small company without a proven track record. I, for one, wish them luck.

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Newshare Enters Pay-As-You-Click Market

Excerpts from an article by Jeremy Carl published in Oct. 1995 in **Web Week**, published by Mecklermedia. This article is no longer online at the site; current issues are found at [Web Week](#).

Williamstown, MA-based Newshare has begun alpha-testing its new Clickshare pay-per-click system, which is scheduled to debut as a full-fledged service in early 1996.

....Other subscription-based programs have appeared on the market in recent months, but Newshare is positioning its product as differing from its competition in terms of its pricing structure. The company will go after low-end subscriptions by enabling individual providers to charge as little as 10 cents per page and up, making transactions that would be impossible or worthless with a credit card economically feasible. Revenues

from such sales will be divided among the publisher of the content (royalty), the referring publisher (referral commission), and Newshare, which will take a percentage as a transaction fee (tentatively set at 15 percent).

Newshare Preident Bill Densmore explained a hypothetical transaction with his system. "Let's say you click on a link from a story about the Boston Red Sox in the San Jose Mercury News. The link takes you to the Boston Globe's Web site, where another story is. Using Clickshare, the San Jose Mercury News, as the referring publisher (the source of the link) would take a certain percentage of the transaction and the Boston Globe (the actual publisher of the article) would also take a percentage." For this system to work, both must be running the free Clickshare software.

While the Web has always offered easy navigation between content on different sites, products such as Newshare may make the subscription-based model of Web usage a more common phenomenon. "We're creating a platform for publishers to share users and share content without having to surrender their copyright, without selling physical control of their material," said Densmore.

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Clickshare Promises Publishers a Way to Make the Web Pay

Excerpts from an article published October 3, 1995 in **WEBster**, the online biweekly published by Tabor Griffin Communications. Here's where the original of [this article](#) may still be found. For information, see [WEBster](#).

Williamstown, Mass. -- Publishers can stop banging their heads against the free content wall, maybe. Late last month, Newshare Corp. announced they had developed the excelsior that will allow Web businesses to sell information by the page.

Called Clickshare, the system is run from the publisher's server and requires no special consumer software. It also handles third-party usage tracking and allows users to invoke automatic parental control.

"Much of the publishing world has held back from participating in the Internet because it lacked a way to charge for information and a way to verify viewership to advertisers," said Bill Densmore, Newshare Corp. president and co-founder. "Clickshare presents a solution to both problems. Clickshare addresses the issue of how to obtain revenue from per-query access to content or databases."

.... "And users can have a single billing relationship with a publisher or Internet service provider yet surf the net freely, purchasing words, sounds or pictures from any Clickshare-enabled site without having to constantly re-register or recall multiple passwords," Densmore said.

Consumers enter the Clickshare universe by registering with a single, independent publisher (or more if the user desires multiple account relationships). Any publisher with the system might then sell a hypertext "page" of information in response to a user's click for a price of 10 cents or less. A range of higher charges are fully supported, as well, if desired by the publisher. The Clickshare system will then charge the home-base publisher of the remote user the 10 cents and will distribute a portion as a royalty to the selling publisher, a portion as a commission to the referring publisher and will retain a portion as a transaction fee....

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Clickshare

Excerpts from an article published October 9, 1995 by Keith Dawson in his twice weekly column, **Tasty Bits from the Technology Front (TBTF)**. Here's where the original of [this article](#) may still be found.

Here is an appealing proposal, called Clickshare, from Newshare Corp. of Williamstown, MA (which bills itself as "The Internet's first news broker- age" -- though it seems to me that Clickshare's potential applications extend well beyond news gathering and distribution). I first read about it in *Online Business Today*. Clickshare addresses a number of the outstanding obstacles to online commerce:

- The lack of an economical way to track and bill for small-value transactions across many Net services
- The desire for anonymity in Net value transactions -- i.e., a virtual equivalent to cash
- Users' disinclination to send credit-card data over the Net
- Users' concerns about divulging personal information to a myriad of suppliers, in order to gain access to the content they offer
- The unwieldy and growing set of authentication/password information that each online user must track as s/he signs up for disparate Net services
- The requirement of advertisers to know, on at least a statistical / demographic basis, who is receiving their messages
- Parents' desire to keep offensive Web content from their children
(<http://www.atria.com/~dawson/tbtf/archive/0031.html>)

....The Clickshare system tracks your Web-surfing activities, but anonymously, and accumulates similar data for all users throughout the system. This allows advertisers and publishers to access demographic reports of what users are requesting without compromising users' privacy.

Clickshare is not the first proposal of this type but it may be the most comprehensive to date. It combines features of Digicash's ecash (<http://www.digicash.com/ecash/ecash-home.html>), IPro's I/CODE system (<http://www.ipro.com/>), and some of the back-office functions of Open Market (<http://www.openmarket.com/products/ProdDescrTMS.html>). It requires no hardware or software at the user end. And it offers the advantage to the user of entrusting personal information only to one single organization that s/he can freely choose.

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This page (<http://www.clickshare.com/pubpack/clickclips.html>) last updated 5 August 1996

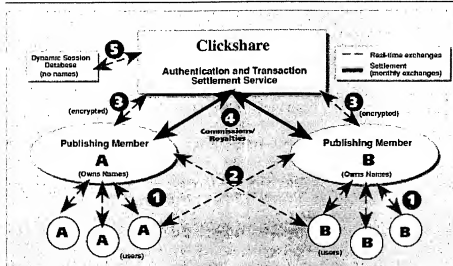


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How Clickshare works -- a non-technical

explanation)



● Clickshare step-by-step with a user named "Click"

Step 0: Click opens an account at **Publisher A** through secure off-line channels (completing a registration process that began online). A becomes Click's Home Publisher.

Step 1: Click logs in to Publisher A, enters a personal ID and password, and gets A's home page customized with links reflecting Click's interests.

Step 2: Every time Click starts a session, Click signs in to Publisher A, and can choose links from this custom page, accessing information at Publisher A, as well as at **Publishers B and C**, (other publishers participating in Clickshare). Clicks to content on A, B, and C are all logged by Clickshare. Click is free to use any other web site (though access is then not tracked).

Step 3: Periodically, Publisher A bills Click for receipt of content at A, B, and C using a rate schedule common to all three, but a billing schedule developed by A (which may be based purely on the common rate, or blended with subscription).

● Clickshare step-by-step for Publisher A

Step 0: A installs Clickshare-enhanced Web primary or adjunct software on its server. Publisher opens account with Click, including demographic information, releasable under terms determined by Click (who may benefit from providing demographics by paying lower rates for information).

Step 1: When Click logs in to A to begin a session, A authenticates Click, registers a "profile" of Click to the Clickshare service, and delivers Click's custom page. This profile includes service preferences for items such as parental control, advertising intrusiveness, and prompts for premium charges.

Step 2: When Click accesses B and C, they each check with Clickshare to be sure a valid authentication exists for Click. In return, they are passed Click's preferences.

Step 3: A charges Click by subscription or by the page, based on enhanced log records returned in real-time by Clickshare and delivered at settlement time to A. A also settles accounts with B and C via the Clickshare clearance system, paying for Click's access to their pages, being paid by B & C for **their users'** visits to A pages, and collecting commissions for having sent users to B & C. A, B and C pay Clickshare Corp. transaction fees.

Step 4: A may sell aggregated data of clickstreams correlated with demographic data (if Click and other users permit) to advertisers or intermediaries, for marketers to analyze.

● Clickshare step-by-step for the Clickshare Service

Step 1: At the start of each session, A passes to Clickshare Click's ID and preference information.

Step 2: The Clickshare Service validates and authenticates Click, and passes on Click's universal anonymous user ID number and preference information to B and C. Clickshare at no time learns the actual name of user Click.

Step 3: At least monthly, Clickshare sends to A records of Click's "page visits" from multiple independent sites, including session IDs, time stamps, and service class information, all of which Clickshare has independently accumulated in real time.

Step 4: Clickshare collects fees from participating publishers based on number of users and transactions.

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Technical requirements to run the Clickshare

Web Server on your site

Software Status

The Clickshare software you'll run at your site is currently in "beta" release form. At this development stage, your technical staff can expect to encounter issues related to configuration of the software to match local site conditions, and ease of use. A major goal of this release is to get feedback from publishers on service classes and other user management techniques we have built in. So, you will have opportunities for creativity, as well as occasional frustrations.

Your technical operations personnel need to know only a few things about the beta edition of the Clickshare Access and Payment System (CAPS):

- **We run on the Unix operating system.** Ports of our software have been completed for
 - Sun Solaris 2.x.
 - Digital Unix 3.2
 - Silicon Graphics IRIX 5.x
 - BSDI BSD/OS 2.1
 - Linux 1.2.x

A port to IBM AIX will follow soon, also as a beta release. A port of the Clickshare Web Server to Microsoft Windows NT is planned.

- **Our web server is based on easy to install, well-understood NCSA web server.** Nearly all Unix webmasters have the experience necessary to install this server. Over 70% of commercial sites use this server or one of its derivatives.

Clickshare is currently developing a port to the **Apache** Web Server, currently the Internet's most popular Web Server, and a derivative of the NCSA Server. This port will be available as an "alpha" release in October 1996. The experience with Apache will allow us to port to the Netscape server in Fall 1996.

- **Clickshare anticipates that it will add secure-commerce features** to its server implementations when export rules and restrictive patent requirements are eased. We expect that commercial secure server vendors will port Clickshare code to their implementations as market forces demand (an effort we will support).

The folks at [Community Connexion](#) have developed a [secure version of the Apache Web Server](#).

Server Installation Information

1. **Auxiliary software is included.** It is contained in a single directory tree and can be executed from that tree or from normal bin directories. The auxiliary software includes:
 - registration database management tools
 - email redirector

- o testing and verification tools

2. **Our source release requires the Free Software Foundation GNU cc ("gcc") compiler suite.** The current release -- 2.7.0 -- compiles easily on all the major unix architectures, including Linux and BSDI on Intel machines. All our software is written with and for "gcc". Our auxiliary code -- CGI scripts and the like - requires Perl version 5, which is also available on all major unix architecture.

For the beta Clickshare release, these development tools need to be available on the server workstation.

3. **Sites currently running a commercial secure server** can run either Clickshare or the commercial daemon on the primary service port with the remaining daemon, as well as others, on auxiliary ports.

Sites running Personal Library Software Inc.'s PLWeb search engine can be configured to simultaneously address search queries to one or more such daemons on the same machine.

4. **Our software does NOT consume lots of machine resources** -- that is, over and above what is consumed by a "normal" web server. We recommend that a minimum of 32MB of RAM and 1GB of hard disk storage be available on any of the hardware mentioned above. Those machines that will run full X Window System displays in addition to running the HTTP server should have a minimum 64MB of RAM.

Your technical questions can be addressed to the general contact names at [Clickshare Publisher Packet](#) or directly to: David Oliver, Managing Director -- Technology <dave@newshare.com>

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This page (<http://www.clickshare.com/pubpack/techreq.html>) last updated 08 Aug 1996 (dmo)



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Clickshare Technical FAQ

We see these explanations of how Clickshare operates, recently written by **David M. Oliver**, Managing Director-Technology: <dave@clickshare.com>, as the starting point for a more complete FAQ. (The existing Clickshare FAQ on general topics needs an overhaul and updating!)

Terminology

- **service provider:** a Web Site operator who either vends information or entertainment content, or maintains a financial relationship with users, or both.
- **billing entity:** the Clickshare Service Provider that maintains the billing relationship with the user
- **home site:** same
- **publisher:** a Clickshare Service Provider who vends information or entertainment content
- **home publisher:** same; but additionally acts as billing entity for some users
(Note that Clickshare allows all possible combinations for vending content and managing users)
- **Clickshare Web Server:** the HTTP server process(es) running on equipment owned or operated by a billing entity or publisher
- **Clickshare Authentication Service:** a user authentication service provided to Clickshare Web Servers via a set of Clickshare Authentication Server machines operated by Clickshare Corporation.
- **Clickshare Logging Service:** a transaction logging service provided to Clickshare Web Servers via a set of Clickshare Logging Server machines operated by Clickshare Corporation.

Q: What kind of connection is used between merchants (publishers) and Clickshare (e.g. requesting/authenticating a token)?

A: The Clickshare Web Server at each Clickshare Service Provider (publisher or billing entity) maintains a persistent connection to the Clickshare Authentication Service. Billing entities request authentication tokens for their valid users; publishers ask that these be validated.

The protocol running over this connection is our own design, as lightweight as possible. The protocol is datagram-based, with reliable-delivery provisions built-in.

The "Clickshare Authentication Service" consists of a set of machines, operated by Clickshare Corp, that offer Clickshare Authentication. If a Web Server's connection to one such server is broken due to server error, bad network, etc, it is possible to reconnect to another authentication server on the fly.

Q: Is this connection always open or must it be re-established everytime?

A: The connection is initiated when the Web Server starts up. It is always open, re-established only after failure (of either end).

Q: How many of these connections per second can a typical server handle?

We need to re-phrase this, given the above, into **two questions:**

1. How many requests (acquire, validate, invalidate...) can one Clickshare Authentication Server handle per

second?

A: This depends very much on the quantity of "iron" one throws at the problem. Our early experience suggests that one small machine (Intel Pentium, say) can handle about 25 requests per second - or about 1M requests in a (12 hour) day. We have noted that this volume scales well with changes in processor performance probably to the point where throughput is limited by the network interface (ability of the network to deliver packets to the machine's network adaptor, and the ability of that adaptor to deliver packet's to the process).

Please recall that Clickshare's "token validation" bears NO resemblance to the "credit card verification" process (where, for each request, a separate call is opened and closed).

The Clickshare Authentication Service can be thought of as an "authentication proxy". The billing entity's Web Server tells Clickshare:

"This is a valid user. Register this user for a new session, and validate all the user's requests for me (within the confines of service parameters and so forth that we both agree on)".

All other Web Servers then request authentication information from Clickshare, which can perform this service at very high speed.

2. How many Web Servers can a Clickshare Authentication Server handle at once?

A: Given the numbers above, the volume of requests to be processed is more important than the number of servers handled. It might be that 5 high-volume web servers (+250,000 requests per day) might be served by a single Clickshare Authentication Server, or that 25 medium volume servers (50,000 requests/day) are serviced.

Each server of the Clickshare Service is designed to handle a scalable number of Web Server "clients". Clickshare Corp advises the operators of these Web Servers which authentication servers it can connect to. The "load" is balanced by authorizing a mixture of sites for each authentication server. (wouldn't an automatic load-balancing technique be nice?! coming soon...).

Requests are handled on a first-come, first-served basis. No priority is given to large sites (for example), even though a large site may consume 25% of an authentication server's service bandwidth.

Q: Can the token authentication be handled by some distributed processing network or must it be centralized? Are there any concerns for bottlenecks during peak times?

A: As explained above, the Clickshare Authentication Service is very distributed (offered by a set of machines, not a single machine). The Service can be scaled by adding more authentication server machines, by making each machine more powerful, and by judicious placement of the servers around the internet (to limit the number of hops between Web Server and Authentication Server). Each Web Server has a set of machines that it can contact for service.

It is certainly true that the Clickshare Service "imposes" a third party into the transaction scheme. And, of course, when thinking from a "vulnerability" viewpoint, adding anything between the two parties of a transaction creates weak points (if, say, the mid-point goes down). However, the weakness is also the strength - imposing a neutral third party on the process provides for third-party verification. We think this is crucial for widely adopted transaction services. Its an engineering problem to design the service in such as way that it is tolerant of many kinds of failure. (That's been our goal from the start).

Q: What kind of security is used to prevent unauthorized use of tokens? (no encryption?)

A: We have always felt that the need for security must be balanced with the risk of exposure. There are two ways to minimize that risk: technical and financial.

Tokens in the Clickshare Service have limited value - limited in time, and limited in dollar value (in that everyone we're currently in discussion with wants begin by using the Service for small-value transactions (\$.10 -> \$1.00), as we had planned). The contents of the token are not readable by any of the Web Servers (who deal with the token as an opaque string in all cases). Therefore, private key encryption can be used for the token (since only the Authentication Server that issued the token has to read its contents). Second, several parameters are built into the service that can act as a "throttle" on the amount of use a token gets. This prevents a thief from rapidly acquiring volumes of chargeable material (say, using a specially designed "agent" program). Thirdly, each token is anchored to one IP address, and valid for only one session. Thus, theft of a token also requires IP spoofing by the host as well.

That's the current technical setup. In the immediate future, we see several schemes for providing a high-security service that could comfortably scale to higher dollar values per transaction. These depend on widely available browser features which are not yet available, though they are being "standardized" (by the browser vendors, through the Internet's IETF). We think it is important to remain "browser independent" even if that appears to limit our available options.

Note however, that there is a quantitative difference between low value transactions and high value ones: in the latter, the user expects to "pre-approve" each one. For low value fare, it's probable that the user will not want to be interrupted for every information request, but rather might want to be advised at the end of a session. The Clickshare Service is designed to be a minimally intrusive service, fast-acting and out of the user's view. Thus, it lends itself to the high-volume, low-value arena of purchasing information rather than "objects".

The other aspect of security is bearing the financial risk. If the user or the web server operator were to bear all the financial risk for purchasing information, then the Clickshare Service would have to be very close to "perfectly secure" (impossible actually) to be accepted. In fact, Clickshare does bear some of the financial responsibility, and needs to build into its service fee structure a buffer for dealing with fraudulent transactions.

Q: Who would handle customer complaints? (home publisher?)

A: The experience at First Virtual Holdings is that they get every kind of customer service call possible - even though they are responsible for a very tiny part of their customer's Internet use. Therefore a question like this has to answer authoritatively.

We feel customer service complaints are likely to be handled most often by the billing entity. That's one reason why we profit-share with the "home publishers". However, I think that users will quickly recognize repeated failures on the part of specific publishers, and directly interact with them. Further, I think large numbers of complaints against a publisher will result in action by the home-site operators themselves (in this regard it is very similar to the credit card model, I think).

Clickshare will be involved as a record-keeper, I think - verifying records of transactions.

Q: What share of total costs (averaged over all transactions) would arise from customer service?

A: That's a question I can not answer from experience - I can not point you to any deep experience here at Clickshare, or with any other service except First Virtual (who published a paper on this topic!). Of course, FV is not a micro-transaction service.

Our financial model shares a portion of the service fee with the billing entity that actually manages the customer relationship. Thus, we recognize the customer service challenge implicit in managing that relationship.

Q: What share of total costs would arise from server processing and storage both publishers and Clickshare?

A: Clickshare Corporation's largest cost is likely to be the authentication and logging servers themselves, especially if we generate the high volume of transactions we hope to generate. We will probably require premium "real estate" on the network, which adds to the cost.

The costs for publishers and service providers will very widely depending on how the Clickshare model is adopted. If publishers themselves wish to acquire and manage bases of users (so that they can provided such users with personalized services), then publishers will have to bear the expense of serving that user base (see above). However, if banks, credit companies, and/or telcos become the organizations that service users, then publishers will have near-zero user service costs (that is, belonging to the Clickshare universe will have minimal operational cost impact). In this latter model, billing entities will bear the cost of maintaining the customer relationship (but, on the other hand, get to have the financial an service advantage of that relationship as well).

Early on, we viewed the world as "publisher-centric" (owning both content and users). Now, we see a recognition that customer service is a challenge most publishers are not used to. Over time, we think that the traditional billing companies will provide some advantages, while the publishers themselves provide others. The Clickshare Service itself is not biased toward a certain outcome.

Q: What increased bandwidth for the merchant might be required to handle transactions? What share of total costs would arise from communications (bandwidth) both for the publishers and Clickshare?

A: Sadly, we are not able to provide anything but a heuristic answer to this at this time: Our service is as low bandwidth as is possible with today's IP technology. In the model where service providers and publishers are distinct, publishers will see very limited bandwidth decay due to our service alone. The service providers, who are likely to be providing a set of auxiliary Clickshare services to users (daily expense reports, balances, transaction history, etc) will see more decay certainly.

But, overall there are fewer than 1000 bytes per request - actually fewer than 500. So, if one can (dare!) assume that the average URL request results in 8192 bytes sent to the client (which itself generates a lot of connection setup/tear down bandwidth), then our service adds 6% (including both authentication and logging in this value).

Actually, we think bandwidth is not the concern. We think LATENCY is the concern. We have designed a system that is low-latency so that the consumer sees no "interference" in acquiring information. Recall that there is NO bandwidth increase at all between client (browser) and Web Server, where the connection speed is typically poorest.

Q: What fraud/ error rate to you anticipate using Clickshare?

A: Again, very difficult to determine beause no one has any experience with "systematic fraud" (which, in my mind is the danger here). The large credit card companies use about 12-18 basis points to cover fraudulent charges (this compared to 300 basis points as the number of users from whom they generate zero income due to the party paying his/her bill on time!).

Technical inquiries to David M. Oliver, Managing Director-Technology: <dave@clickshare.com>

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This page (<http://www.clickshare.com/pubpack/techfaq.html>) last updated 10 July 1996

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Terms of enrollment for Clickshare Publishing

Members

A publisher or other owner of copyrighted content must obtain a licensed copy of the Clickshare-enhanced server software. This software is available for free from Clickshare Corp. and may also be bundled with commercial Internet server products. This enhanced server permits user registration and profiling at stand-alone sites.

To use the cross-server validation, third-party auditing (access-tracking) and transaction processing facilities of Clickshare, the publisher must become a member/licensee of the Clickshare system. This enables the receipt of royalty payments for the publisher's copyrighted content accessed by Clickshare-enabled users worldwide -- and the payment of commissions to you when your users purchase content from other Publishing Members. The member/license charges include:

- A one-time member enrollment and system license fee of \$1,995.00.
- An annual fee of \$3 per user the publisher enrolls in the Clickshare system (payable quarterly). These fees will be scaled for publishers with over 10,000 users.
- A maximum transaction fee of 20% for each information purchase executed via the Clickshare system. This fee is charged monthly by Clickshare to the Home Publisher Member of the enabled user and may be applied to the user's account or absorbed by the publisher.

Clickshare system membership also includes:

- The right to link to content of other Clickshare Publishing Members (but not to publish in print form), per the Publishing Member Agreement.
- Support software -- Common gateway interface (CGI) scripts, HTML files and auxiliary programs to assist in the management of your WWW server.
- A 10-25 word factual description of the Publishing Member's copyrighted content at the Newshare Common Resource Center, accompanied by a hypertext "link" that will automatically connect the user to that content, wherever it is located.
- A subscription to the Clickshare-UPDATE email newsletter which provides current-awareness on the interactive marketplace plus a way to exchange ideas with other Publishing Members.

A Clickshare(sm) publisher may optionally apply for membership in the Newshare Service, guaranteeing status as a "preferred link" on Newshare Common Resource Center Topics pages and qualifying the Publishing Member for possible selection as a lead topic-specific or geographic-specific information resource.

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Clickshare Access and Publishing System

Alpha version license agreement

Instructions to Internet publishers and other potential Clickshare users

Participation in the alpha-stage of the Clickshare Access & Publishing System requires agreement to the terms in the document below.

You may print this document, sign it and fax it to 413/458-8002

or mail to Clickshare Corp., One Bank St., P.O. Box 367, Williamstown MA 01267.

We will counter-sign and return a copy to you.

This is an agreement between Clickshare Corp., (the "company") and

Company name of tester

(the "Tester"), in which Tester agrees to test a software program known as Clickshare (the "Software") and keep the Clickshare Corporation (the "Developer") aware of the test results.

- Developer's Obligations:** Developer shall provide Tester with a copy of the Software and instruct Tester on how to use it and the desired test data to be gained. Upon satisfactory completion of the testing, Developer shall furnish Tester with one free copy of the production version of the Software, and shall waive enrollment fees for Tester to join the Clickshare and/or Newshare Publishing System, contingent upon the Developer's decision to proceed with production of the Software. Tester shall be entitled to the same benefits to which regular licensees of the Software will be entitled.
- Tester's Obligations:** Tester shall test the Software under normally expected operating conditions in Tester's environment during the test period, subject to Developer-supplied limitations as to numbers of alpha registrants. Tester shall gather and report test data as mutually agreed upon with Developer. Tester shall allow Developer either physical or electronic access to the Software during normal working hours for inspection, modifications and maintenance.
- Software a Trade Secret:** Tester acknowledges that the Software is proprietary to, and a valuable trade secret of, the Developer and is entrusted to Tester only for the purpose set forth in this Agreement. Tester shall treat the Software in the strictest confidence. Tester agrees that it will not, without the Developer's prior written consent:

(a) disclose any information about the Software, its design and performance specifications, its code, and the existence of the test and its results to anyone other than Tester's employees who are performing the testing;

(b) copy any portion of the Software or documentation, except to the extent necessary to perform the beta testing; or

(c) reverse engineer, decompile or disassemble the Software or any portion of it.

4. **Security Precautions:** Tester shall take reasonable security precautions to prevent the Software from being seen or used by unauthorized individuals. This includes locking all copies of the Software and associated documentation in a desk or file cabinet when not in use.
5. **Term of Agreement:** The test period shall last from the earliest date of signing of this document until March 31, 1996 or until otherwise mutually specified. This Agreement shall terminate at the end of the test period or when Developer asks Tester to return the Software, whichever occurs first. The restrictions and obligations contained in Clauses 3, 6, 7, 8 and 9 shall survive the expiration, termination or cancellation of this Agreement, and shall continue to bind Tester, its successors, heirs and assigns.
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THE SOFTWARE IS PROVIDED AS IS, AND THE DEVELOPER DISCLAIMS ANY AND ALL REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO IT, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

8. **Limitation of Liability:** The Developer shall not be responsible for any loss or damage to Tester or any third parties caused by the Software or by the The Developer's performance of this Agreement.

THE DEVELOPER SHALL NOT BE LIABLE FOR ANY DIRECT INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGE, WHETHER BASED ON CONTRACT OR TORT OR ANY OTHER LEGAL THEORY, ARISING OUT OF ANY USE OF THE SOFTWARE OR ANY PERFORMANCE OF THIS AGREEMENT.

9. **No Rights Granted:** Tester understands and acknowledges that the Software is provided for its own use for testing purposes only. This Agreement does not constitute a grant or an intention or commitment to grant any right, title or interest in the Software or the Developer's trade secrets to Tester. Tester may not sell or transfer any portion of the Software to any third party or use the Software in any manner to produce, market or support its own products. Tester shall clearly identify the Software as the Developer's property.
10. **No Assignments:** This Agreement is personal to Tester. Tester shall not assign or otherwise transfer any rights or obligations under this Agreement.
11. **Entire Agreement:** This Agreement contains the entire understanding and agreement of the parties relating to the subject matter hereof. Any representation, promise or condition not explicitly set forth in this Agreement shall not be binding on either party. All additions or modifications to this Agreement must be made in writing and must be signed by both parties to be effective.

12. **Applicable Law:** This Agreement is made under, and shall be construed according to, the laws of the State of Massachusetts.

David M. Oliver, Managing Director - Technology
Clickshare Corporation
One Bank St., P.O. Box 367, Williamstown MA 01267

Date

Tester's company name

Signature

Typed or printed name

Title

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Recent Clickshare press releases

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(For an archive of older Clickshare releases as well as **recent speeches and presentations**, see the [Clickshare/Newshare Information Center](#).)

See also [Christian Science Monitor Launches WWW Edition](#) (CSM Press Release).

And see [Clickshare launches search for CEO](#).

Christian Science Monitor to Adopt Clickshare for Internet Audience Measurement, Transactions

BOSTON, Mass., May 6-- The Christian Science Monitor has decided to use the Clickshare Access and Payment Service on its new Web site, initially for audience measurement, with microtransactions to follow.

The 87-year-old national daily newspaper, whose coverage of the war in Bosnia just won the paper its sixth Pulitzer Prize, plans to launch its presence on the Internet's World Wide Web later this month. The URL will be < <http://www.csmonitor.com>>.

Dave Creagh, electronic publishing manager of the Monitor, said, "We are very impressed with this technology and its implications. The fit between its capabilities and our needs is a very good one, and we feel that Clickshare will soon set the standard for allowing transaction-based pricing on the Internet. Clickshare is a very agile, progressive group which is very willing to work with audit vendors to provide us with a single toolset to measure traffic flow, create payment information, and generate highly sophisticated site audits for our advertisers."

"For The Monitor, Clickshare will produce third-party auditable user data, designed to be acceptable to the Audit Bureau of Circulations and other parties interested in getting accurate reports of website traffic," said David M. Oliver, Clickshare's Managing Director-Technology.

Clickshare Chairman Bill Densmore said, "Clickshare enables users to click anywhere, then pay with one bill."

Clickshare gives users a "digital calling card" allowing them to log in once, and charge purchases from publishers at many websites to a single account. It provides multiple revenue streams for publishers and others who have billing relationships with online users. It also tracks visits to advertiser-supported pages and supports authentication for "intranets".

Multi-site user authentication is now operational. The micropayment service, enabling the sale of information for as little as a dime per click, is in testing.

The Monitor announcement is one of a series of partnerships Massachusetts-based Clickshare Corp. will announce in the near future.

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MEDIA INQUIRIES:

Felix Kramer, Kramer Communications, 212/866-4864 < felix@clickshare.com>

or **Bill Densmore** or **Lynn Duncan**, 413/458-8001 < corp@clickshare.com>

Dave Creagh, The Christian Science Monitor, 617/450-2865 < dave@csmonitor.com>.

Clickshare Closes In On Internet Microtransactions and Measurement

WILLIAMSTOWN, Mass., March 18-- Two publishers have begun trials of a unique technology allowing Internet micropayments by the click, said Clickshare Corp. Monday.

The Clickshare Access and Payment System gives users a "digital calling card" allowing them to charge purchases from publishers at many websites to a single account. It also tracks visits to advertiser-supported pages and supports authentication for "intranets".

Initial publishers are:

* *Studio Briefing*, a daily entertainment industry news intelligencer.

* The writer-owned *American Reporter* calls itself the Internet's first digital-only daily.

Multi-site user authentication is now operational. Customers starting at [Clickshare Try It](#) can register at either Web site, which becomes their "home". They can then use the other site during a session without being prompted for an ID or password.

"Soon we'll be able to offer publishers a new revenue stream -- selling each others' information for as little as a dime per click, seamlessly exchanging royalties," said Bill Densmore, Clickshare chairman and CEO.

"Clickshare creates the opportunity publishers have been waiting for -- the ability to get paid."

Customers make payment arrangements off-line, so no credit information crosses the Internet. During the second quarter of 1996, after testing of the micropayment settlement infrastructure ends, users will be able to buy pages from multiple sources, with publishers getting aggregated sales information and users getting periodic single-account billing from their home publisher.

"We've been careful not to announce 'vaporware'. Though we're still in development, we're far enough along -- technically and with potential strategic partners -- to present Clickshare as an option for online businesses," added Densmore.

Clickshare's focus on microtransactions (purchases of information, software "applets," and other data typically priced under a few dollars) means it is complementary, not competitive, to other e-cash systems, said Densmore.

"Clickshare, operating across multiple unrelated sites, working with any browser, and requiring no central database, also provides an ideal verification utility to track web audiences for advertiser-supported pages, with low impact on personal privacy," says Densmore.

Massachusetts-based Clickshare was spunoff from Newshare Corp. in December. It is privately funded and is in negotiation with strategic equity partners.

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MEDIA INQUIRIES:

Felix Kramer, Kramer Communications, 212/866-4864 <felix@clickshare.com>

or Bill Densmore or Lynn Duncan, 413/458-8001 <corp@clickshare.com>

Newshare Corp. Joins Ad Industry's Interactive Alliance; Says Its Clickshare System Will Support "CASIE" Guidelines

WILLIAMSTOWN, Mass., Nov. 13 -- Newshare Corp., developer of the Clickshare tracking and transaction

system, said Monday it had joined the Interactive Alliance, an advertising-industry consortium developing Internet audience-measurement standards.

The company also said it will support privacy and other guidelines contained in an industry white paper developed by the Coalition for Advertising Supported Information and Entertainment (CASIE). CASIE's members control the majority of the \$150 billion U.S. advertising market.

"The addition of Clickshare adds strength to The Interactive Alliance," said Marshall L. Snyder, executive vice president, Arbitron NewMedia and an alliance founder. "Their business proposition has the potential to generate large numbers of identified web users."

Newshare Corp. is alpha-testing its Clickshare system, which enables Internet publishers to cooperate in generating and sharing content revenues. The absence of a micro-transaction information standard has prevented many publishers from using the World Wide Web so far.

Under Clickshare, each consumer chooses a most-trusted publisher to whom to identify himself/herself and Clickshare will never see the names. That publisher and user determine how the user's name and demographic information may be used.

Simplifying information access

Clickshare enables the anonymous tracking of individual users as they jump among unrelated Internet sites, and offers a facility to settle information transactions down to as little as 10 cents. Clickshare requires no special user software and simplifies user access to information by rendering multiple registration at Web sites unnecessary.

"The Interactive Alliance has already brought together so much of the industry in acknowledging common principles, it will make our job easier to bring about publisher cooperation," said Bill Densmore, Newshare's president. "And the CASIE working group principles strike a laudable balance among marketing requirements for a user census, the consumer's need for ease-of-use and democracy's need to assure personal privacy."

CASIE is a joint project of the Association of National Advertisers and the American Association of Advertising Agencies with the support of the Advertising Research Foundation. It seeks to define a universal standard for third-party verification of audience claims by Web publishers which gathers uniform usage data about individual users, while respecting their privacy.

"Audience measurement efforts which adhere to the CASIE principles should help grow interactive media and benefit all those involved, including advertisers, media buyers and sellers," said Judy Black, senior partner and director of the BJK&E Interactive Group and also the chair of the CASIE research subcommittee.

What is the Alliance?

The Interactive Alliance is working to assemble the most comprehensive and definitive ongoing database on worldwide interactive media use. It was formed in 1995 by Next Century Media Inc., and The Arbitron Company. Other consortium members, in addition to Newshare Corp., now include Interse, McCollum Spielman Worldwide and MarketCast.

The Audit Bureau of Circulations and its technical support affiliate, WebTrack, have agreed to be participants in the work of The Alliance. Representatives of over 40 other industry organizations have agreed to participate as alliance advisors.

"Clickshare and The Interactive Alliance share a philosophy of cooperatively lifting the Interactive lake to raise

all ships," noted Bill Harvey, president and CEO, Next Century Media. "It turns out that the Internet, which arose like topsy with no central direction, can become a more valuable business for content providers and advertisers by the same process of decentralized collaboration."

The advertising and publishing industries are struggling to reach a technology and consensus for the measurement and tracking of World Wide Web usage. The Newspaper Association of America has convened a Nov. 14 summit in Dallas so that major publishers and system vendors can discuss audience measurement principles. Newshare is among invited participants in the summit.

About the participants

Newshare Corp. was founded in September 1994 by a veteran publisher, a university technologist and a marketing executive as the Internet's first news brokerage, with a goal of building a free market for digital information among independent publishers and their users. Its first product is Clickshare. Williamstown, Mass.-based Newshare is privately funded.

Next Century Media Inc. is a team of advertising and media-research executives committed to maximizing the effectiveness of Interactive media worldwide for advertisers, agencies, network operators, content providers and consumers. Next Century Media clients include advertisers and agencies collectively representing over \$23 billion in annual advertising investments, plus a large number of network operators.

Arbitron NewMedia, a unit of the Arbitron Company, was established in 1994 to provide a wide range of survey research, consulting and methodological services to the cable, telecommunications, direct broadcast satellite, online and new media industries. The Arbitron Company is a media information firm providing services to broadcasters, advertisers and agencies. The Arbitron Company is a division of Ceridian Corp.

NOTE TO EDITORS:

The Newshare document, "Key Points About Clickshare, CASIE and Audience Measurement," is available at:

<http://www.newshare.com/News/audience.html>

The "CASIE Guiding Principles of Interactive Media Audience" are available at:

<http://www.commercepark.com/AAA/bc/casie/guide.html>

FOR MEDIA INQUIRIES:

Newshare: Press inquiries to Felix Kramer, Marketing Director, (212) 866-4864 <felix@newshare.com>

Other inquiries to Bill Densmore, President, (413) 458-8001 <densmore@newshare.com>

Arbitron NewMedia: Thom Mocarsky, (212) 887-1314.

Next Century Media: Bill Harvey, (914) 255-2222 or (415) 331-0389.

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About Newshare and Clickshare Corporations

Newshare Corporation is a privately-held Massachusetts-based supplier of interactive media products to newspapers, broadcasters and the public through [Newshare Syndicate](#), the [Newshare Common Resource Center](#), and, in the future, the Newshare Adshare.

Newshare Corp. is establishing a nationwide electronic brokerage for the multi-media collection, editing, moderation and marketing of time-sensitive, general-interest news and advertising. Material will be organized both geographically and by interest area for direct consumer use. Newshare's goal is to become a worldwide licensor of local- and topic-specific information franchises which share users and information through the Clickshare service.

Newshare Corp. based in Western Massachusetts, has devoted increasing portions of its resources and attention in the past year to developing and bringing to market the Clickshare Publishing Sytem, to track movements and settle charges for digital transactions on the World Wide Web.

In fall 1995, **Clickshare Corporation** was incorporated in Massachusetts as an independent company.

Clickshare is currently primarily owned by Newshare Corp., but is now in the process of bringing in additional strategic and technical partners, investors and other allies -- with the goal of establishing Clickshare as an open standard on the Internet for digital microtransactions.

For the people behind Newshare and Clickshare, see [Who's Who at Newshare and Clickshare](#).

For more information about Newshare Corp., you can pursue links (many of which need updating) beginning at [Newshare home page](#).

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Newshare®



Who's Who at Clickshare

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* denotes members of the Board of Directors. (Four vacant seats are being held for a CEO -- [Clickshare search in progress](#), strategic partners and key advisors.)

Key contacts are listed first. Click on any name to find out about:

[William P. Densmore*](#), board chair

[David M. Oliver](#), technical director

[Felix Kramer*](#), marketing director

[Lynn A. Duncan*](#), operations consultant

[Michael J. Callahan](#), software designer

[John Kemp](#), programmer

[Wayne Tvedt](#), programmer

[John A. Renaud](#), affiliate sales

[Julius Rosenwald*](#), board member

[William J. Drummey](#), executive recruiter

William P. Densmore Jr., (413) 458-8001 <densmore@newshare.com> 42, is serving as **chairman** of Clickshare's Board of Directors.

Densmore is also Newshare's (Clickshare parent corporation) president and managing director -- editorial, as well as co-founder. He has 20 years of editorial experience, including four with The Associated Press as an editor and reporter in Boston, Chicago, Springfield, Ill., and San Francisco. He has written for *The Boston Globe*, served as an associate editor of *Chicago Lawyer* magazine and was New York bureau chief for *Business Insurance* magazine, published by Crain Communications Inc. For nine years from 1983 he was a majority stockholder and president of *Williamstown Advocate* Inc., which owned and published two weekly newspapers in Berkshire County, Mass. During his tenure the papers' revenues and circulation more than tripled. The newspapers were sold in late 1992. He is a graduate of Phillips Exeter Academy and the University of Massachusetts at Amherst. From mid-1993 until late 1994 he served as editorial director and special-projects editor at Turley Publications Inc., in Palmer, Mass., before leaving to found Newshare. He is a consultant to Empire Information Services Inc. of Schenectady, N.Y. Densmore and his family reside in Williamstown, Mass.

David M. Oliver, <dave@clickshare.com> 40, is serving as **managing director/technology** of Clickshare Corp. and is a former member of its Board of Directors.

Oliver is chief architect of the Clickshare Access and Payment Service. A Newshare co-founder, until he began to focus all his efforts on Clickshare, he served as technical director of the Center for Geometry Analysis, Numerics and Graphics, an internationally recognized center for geometry research at the University of Massachusetts at Amherst. Oliver has over 12 years' experience in delivering very-high-performance computing environments to the scientific research community. His experience includes scientific image processing, real-time computer graphics, distributed computing and network information retrieval (NIR). Oliver is fluent in the Internet protocol suite, familiar with LAN, MAN, and WAN telecom standards, and has complete familiarity with both the client and server portions of most modern network computing applications. Oliver holds an undergraduate degree from the University of Colorado at Boulder and a graduate degree in landscape architecture from UMass- Amherst. From January through mid-July, 1995, Mr. Oliver was on leave from his UMass post conducting research at the Technische Universitaet Berlin in Germany. He and his family reside in Belchertown, Mass., near Amherst.

Felix Kramer, (212) 866-4864 <felix@clckshare.com> 47, is serving as **marketing director** for Clickshare Corp. and is a member of its Board of Directors.

Kramer is also president of [Kramer Communications](#), an online promotion and electronic publishing business.

William J. Drummey, 508/975-7558 <wjdrum@ultranet.com>, is Clickshare's retained executive management consultant for a CEO search.

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Newshare®

Attachment I

The Internet's first news brokerage (SM)

Welcome to the Newshare Syndicate!

We are a broker of news and features on the Internet, delivering multimedia content from media companies and individual writers to users of World Wide Web. We are presently enrolling Contributing Members and Publishing Members who wish to provide content through our Newshare(SM) system of page-per-page viewing.

HOW THE SYNDICATE WORKS

The Newshare Syndicate is a launching pad for Internet-centric news and information content, including text, photos and -- later this year -- sound.

- As a individual content provider (Contributing Member), when you join the Newshare(SM) Syndicate you become a part of a growing network of Internet-enabled artists who plan to offer their work to the public without have to affiliate with have to restrict themselves to a proprietary online service, without having to be tied to a particular publication and with a high degree of control over the way their work is displayed and marketed.
- As a corporate content provider (Publishing Member), when you join the Newshare(SM) Syndicate, you position yourself to make money on your Internet activities through the implementation, later this year, of our Token Validation Service (TVS) charge-per-page royalty system. You also enable the local users of your service to "click" to members-only content worldwide, when available.

KEY SYNDICATE RESOURCES:

[Direct-connect to Syndicate articles, columns, news and resources](#)

[Join the Newshare Freelance electronic mailing list](#)

To become familiar with Newshare Corp. the Newshare Common, Newshare AdShare, *Your* Newshare, the Newshare Communications Center and the Newshare Resource Center use the links below.

If you would like to become a Newshare Member, and take full advantage of the Newshare you are in the right place.

Quick Guide to **Newshare Member Definitions**

- *Four ways to become a member.*

Newshare Memberships**Newshare Contributing Member**

- *Offer your content to our Publishing Members from your own "home page studio".*

Newshare Publishing Member

- *Get your newspaper, station, newsletter, or column up on the Web.*

Newshare User Member

- *Access to a growing number of publications and a doorway to the WWW.*

Newshare Technical Member

- *Provide the Internet on ramp and we will provide the content.*

SPECIAL PUBLISHING MEMBER RATES

- *Limited time.*

SPECIAL CONTRIBUTING MEMBER RATES

- *Limited time.*

Setting Sale Price

- *Setting the sale price of your work.*

During this *Start-Up* phase, our **Newshare Publishing Members** are offering their work **FREE OF CHARGE** to User Members for personal use.

If you seek to post, repost, publish, forward or otherwise circulate **Newshare Publishing Members** material to other users or to the public, or as part of a published or otherwise circulated work you must obtain permission. All material originating from the **Newshare Resource Center** is copyrighted, even if it is available at no charge.

Newshare Centers**Newshare Corp.**

- *About us, our plans and our vision*

Newshare Resource Center

- *From newspapers to music, from gardening to politics, sports to the weather...*

Newshare Communications Center

- *Talk to us and among yourselves...*

Newshare Common

- *WWW connections from our open-access arena...*

Newshare AdShare

- *Want product information? This is the place...*

Your Newshare

- *Plan on building your personal newspaper...*

[To Home...](#)[To Common...](#)[To Corp HQ...](#)

CLICKSHARE QUICK LINKS TO:

[CLICKSHARE HOME PAGE](#) | [TEST DRIVE CLICKSHARE](#) | [NEWSHARE/CLICKSHARE CONCEPT](#) | [VISION 1997](#) | [VISION 1979](#) | [NEWSHARE/CLICKSHARE NEWS](#) | [GENERAL NEWS TOP](#) | [NEWS TOPICS](#) | [WHAT'S NEW](#) | [HOME PAGE](#) | [LEAVE A COMMENT](#)

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If you have comments or suggestions about **Newshare Resource Center**, please email them to **feedback@newshare.com**.

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The Corporate Office of **Newshare**:

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FAX: (413) 458-8002
EMAIL: mail@newshare.com

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Build your *Personal Newshare*Delivering your share of the news

Newshare Corp. General News Links

Pick a Topic!

Just scroll down if link doesn't work

[Search WWW/NewsGroups/Phone Books](#) | [Link to text-AP news feed](#) | [Topical listings](#) | [Regions/Cities](#) | [General News Resources](#) | [USA News](#) | [World News](#) | [Weather](#) | [Business News and Information](#) | [Wall Street](#) | [Science/Tech](#) | [Travel](#) | [Entertainment](#) | [Sports](#) | [Comics/Fun](#) | [Web News](#) | [Multimedia](#) | [Media News](#) | [New and Cool Sites](#) | [QUICKLINKS](#)

News and Topical Directories and Portals

- [1st Headlines headline aggregation website](#)
- [News Hub Linking Portal](#)
- [NewsLinx Linking Portal](#)
- [TotalNEWS: A search engine that finds the latest topical news updated every two hours](#)
- [Wired News news search engine](#)
- [Newslinx: A daily roundup of links to important technology stories](#)
- [Wired News' "NewsBot" news-only search engine](#)
- [News Index](#)
- [Multi-site search engine \(good for names\)](#)
- [TotalNews](#)
- [Excite's News Tracker Service](#)
- [Direct Hit Search Engine](#)
- [Savvy Search \(multiple search tool\)](#)
- [Google Search Engine](#)
- [Looksmart Web Directory](#)
-
- [Internet Search Tool \(collected site\) NEWSHARE Basic News Resources](#)
- [Newslink Associates' links to 1,700 worldwide news resources](#)
- [NEWSHARE topical directory](#)
- [C:Net's Topical Recommendations for Web Destinations](#)
- [Webcrawler's \(AOL\) Topical Directory Home Page](#)
- [U.S. Business Phone Directory](#)

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Searching and other Services

- [Northern Lights Search Engine](#)
- [Digital Equipment Corp.'s AltaVista Search Engine](#)
- [ALL-IN-ONE: All-in-one search of all "crawlers" at once \(takes a minute\)](#)

- [The McKinley Annotated Search Site](#)
 - [Yahoo's Search/News Site](#)
 - [Saavy Search of multiple search engines simultaneously \(Colorado State\)](#)
 - [A link to other search engines \(Lycos, WebCrawler etc.\)](#)
 - [InfoSeek Guide Search Engine](#)
 - [Open Text Search Page](#)
 - [UC-Berkley Inktomi Search Engine Query Page](#)
 - [DejaNews Topic/Name search of Newsgroup Postings \(archival\)](#)
 - [Switchboard.com U.S. personal/business phone and address directory](#)
- [Alta Vista's Language Translation Service](#)
- [Back to "Pick a topic">](#)

Cities/Regions

- [Newsworks alpha list of U.S. newspaper web sites](#)
- [City.net Search for worldwide info on specific cities](#)
- [Citylink to U.S. city resources](#)
- [Links to newspapers by U.S. states, regions and worldwide regions](#)
- [New England Regional AP news](#)

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General News Resources

[Individual Inc.'s "Newspage" Breaking News front page](#)
[British Broadcasting Corp. News Online](#)
[Excite's News Tracker front page](#)
[Infoseek's Premier News Front Page](#)

U.S.

[The American Reporter online week-daily](#)
[New Century Network's NewsWorks site \(best of 130 U.S. newspapers\)](#)
[CNN Front Page \(text only\)](#)
[Reuters News Headlines via Yahoo's beta site \(valid 07-29-95\)](#)
[Reuters U.S. News Summary \(via InternetMCI\)](#)
[Searchable Associated Press \(free registration\)](#)
[Pathfinder's \(Time/Warner\) Current News Web Site](#)
[Pathfinder's Text-only news summary site](#)
[TIME Daily News Summary](#)
[Mercury News National Section \(highlights only; \\$\\$\\$ for full text\)](#)
[Individual Inc.'s NewsPage Resources \(mostly tech-related\)](#) [ClariNet News Summaries](#)
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World

[Headlines from the Christian Science Monitor](#)
[Disaster.NET link to Current Disaster links](#)
[The Electronic Telegraph \(London\)](#)

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Weather

- [U.S. State-by-State Weather](#)
- [U.S. City-by-City Weather](#)
- [U.S. and Canadian Cities Observed conditions](#)

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Business News and Information

[New York Times daily business-news links page](#)
[New York Times collection of business-news and reference links](#)
[Reuters Business Headlines via Yahoo](#)
[Reuters Tech Headlines via Yahoo](#)
[Bloomberg Business News](#)
[New York Times Business News \(FREE REGISTRATION REQUIRED\)](#)
[U.S. Securities & Exchange Commission EDGAR](#)
[Dun & Bradstreet/Lycos Company Info Site](#)
[Wall Street Journal Headlines Only Site](#)
[Wall Street Journal Weekday News Summary \(REQUIRES FREE REGISTERED\)](#)
[The Nando Times Financial Report](#)
[Individual's Inc's database of business news by topic](#)

[Washington Post Business Section Front](#)
[Top Business News from Chicago Tribune](#)
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Wall Street

[StockWiz search by Stock Symbol \(news/info\)](#)
[Bloomberg Business News](#)
[Wall Street Net](#)
[Disclosure Online](#)

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Science/Technology

[Technology "front page" at MSNBC web site Quadnet Science/Technology News](#)
[GNN I-Media center](#)

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Travel

[Bestfares.COM](#)
[LastMinuteTravel.COM](#)
[Priceline.COM: Airline ticket bidding service](#)

[Lowestfare.COM: Airfare ticket excess inventory marketeer](#)
[Southwest Airlines website](#)

Entertainment

[Lew Irwin's TV/Hollywood Studio Briefing](#)
[What's On Tonite! \(TV listings\)](#)

Sports

[National Basketball Assn. Server](#)
[SportsLine USA Sports Server](#)
[Starwave/ESPN joint venture Sports News Server \(present free\)](#)
[Atlanta Olympic Games Server](#)
[Today's MLB Baseball schedule](#)
[NEWSHARE sports resources](#)
[The America's Cup](#)

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Comics/Fun

- [The Borderline](#)
- [United Media's Comics Server](#)
- [Dilbert, by Scott Adams](#)
- [LaughWEB's Daily Chuckle](#)

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Features

[Features stories from Newshare Syndicate Contributing Members](#)
[Today's Almanac](#)

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World Wide Web News

- [Wall Street Journal Interactive Tech Center](#)
- [Good Morning Silicon Valley \(11:30 a.m. EDT\) daily briefing from SJ Mercury](#)
- [NewsLinx Daily page of links to web news articles](#)
- [C|Net's Daily Technology/Web News Site](#)
- [Hot News from Phillips' Internet Week newsletter](#)
- [Newsbytes News Network](#)
- [Nando's Tech News Site](#)
- [Edupage \(Summaries of web news from general publications\)>](#)
- [Washington Post's Business Front Page Daily](#)
- [MecklerWeb's "Internet News" site](#)
- [Upside Magazine's Daily Tech News Site](#)
- [Brock Meek's CyberDispatch column](#)

- [New York Times Syndicate Computer News](#)
- [Cowles/SIMBA Internet Daily](#)
- [Cowles/SIMBA Media Daily](#)
- [CMP's Internet Week Web News Site](#)
- [Inter@ctive Week Home Page](#)
- [MecklerWeb's Netday Service](#)
- [Web Week Online from Meckler](#)
- [InfoWorld USA Web Site](#)
- [Gleason Sackman's Net Happenings](#)
- [PC Week's Daily News Summary](#)
- [Meckler's Web Week Monday](#)
- [What's new at Newshare](#)
- [What's new on Yahoo](#)
- [Link to WEBster Magazine current edition](#)
- [C-NET Online Service](#)
- [Wall Street Journal Computer News Update](#)
- [Wall Street Journal Tech Update](#)
- ["URLs in the News" from PR Newswire](#)
- [URLs for companies using PR Newswire \(archived releases\)](#)
- [Gleason Sackman's Commercial Resources Posting Site](#)

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Multimedia/Audio

- [Multimedia Wire \(news\)](#)
- [AUDIO: Net news reports](#)

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Journalism/Media

[Advertising Age's Daily Deadline Summary](#)
[Cowles-Simba Media Daily](#)
[Media Central](#)
[Steve Outings / Editor & Publisher Magazine](#)
[Newspaper Assn. of Amer. News Page](#)
[NAA's Digital Edge web site](#)
[Steve Outing's Online-News list by hypermail](#)
[Ron Glaser's Online News column](#)

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New and Cool Sites

- [InfiNet's Cool Site of the Day](#)
- [Matt Albert's Weekly list of cool sites](#)
- [Internet Scout Report Weekly](#)

- o [CMP Publication's NetNow weekly site update](#)
- o [NCSA/GNN What's New Page](#)
- o [The Weekly Bookmark \(recommended web sites\)](#)

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NEWSHARE QUICK LINKS TO:

[NEWS TOP](#) / [WORLD NEWS](#) / [STATE NEWS \(U.S.\)](#) / [LOCAL NEWS](#) / [SPORTS](#) / [BUSINESS](#) /
[WEATHER](#) / [TOPICS](#) / [WHAT'S NEW](#) / [SYNDICATE](#) / [CLASSIFIEDS](#) / [LEAVE A COMMENT](#)



Newshare(SM): Interim Publishing Membership Enrollment Information

This page describes the benefits of Newshare publishing membership using the Clickshare Service. After you have read this page, link directly to our [ENROLLMENT FORM](#), or first review our list of [Frequently Asked Questions](#).

Newshare Corp. is accepting applications for immediate enrollment as a Contributing Member. Acceptance entitles the charter Contributing Member to:

- Use of the Newshare name, logo, links and service concepts on an exclusive basis within the Contributing Member's geographic-specific or topic-specific content area.
- A free subscription to the *Newshare-UPDATE* E-mail list which is for content-providing members only. The list will include a weekly newsletter updating events and developments in online publishing written by Newshare personnel and contributors.
- A listing within the [Newshare W3 Contributing Member Directory](#). This listing includes the Contributing Member's name, address, appropriate contacts, a description of exclusive content provided, and a hypertext link to member content, wherever it resides.
- Premium listing and promotion for your content on the appropriate Newshare Syndicate Topics Page. Our [topics pages](#) are a regularly updated source of more than 1,500 links to publicly available resources in more than 80 content areas. If you are not granted Newshare membership, you will not be eligible for premium listing in our topics directory.
- A 50% discount off the one-time, \$795.00 enrollment as a Newshare Publishing Member. By allowing Newshare Corp. to host your content and manage your customer billing, you can sell content on the web without having to establish an account relationship or take credit-card information from every user. To host your own content or manage your own users, you should contact [Clickshare Service Corp.](#) and become a Clickshare Content/Service Provider.

The Contributing Member relationship with Newshare(SM) and other Publishing Members is governed by an [Affiliation Agreement](#) which resolves [copyright](#) and use issues.

NEWSHARE QUICK LINKS TO:

[WELCOME PAGE / SYNDICATE CONTENT / LEAVE A COMMENT](#)

- A page describing options for users and advertisers of Newshare is available via <http://www.newshare.com/Newshare/options.html>

For more information about Newshare, please select from the following:

- *WHO is Newshare?*
- *WHAT is Newshare?*
- *WHERE is Newshare?*
- *WHEN is Newshare available?*
- *HOW will Newshare work?*
- *WHY is Newshare needed?*
- *Is there ANYTHING like Newshare now?*



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this page updated 05-04-2002 12:05 p.m.



Delivering your share of the news

Newshare is designed as a resource center for consumers and publishers... and as a marketing environment for artists, writers and other original content originators...



Your Link....



Your Link....



Your Link....

Newshare has a goal of becoming the leading source for high-quality, timely, local, regional, national and international news and information.

Newshare Contributing Membership:

Newshare Contributing Members agree:

To share and/or offer for sale/resale or in exchange for a "click-fee", or to authorize through a licensing agreement their original content, news and time-sensitive information with our **Newshare Publishing Members**.

As a **Newshare Contributing Member** your privileges cover:

A "studio" space in the **Newshare Resource Center** where you can offer your original content for sale/resale, repackaging, copying or other reuse or distribution by our **Newshare Publishing Members**.

See [Contributing Member Rates & Data](#) for more information.

We can help you set up your HTML site [with no fuss or muss...](#)

Newshare Contributing Members memberships also includes:

- Free member "hyperlinked" listing in **Newshare Member Directory** - our online directory for visitor and member use
- Free member "hyperlinked" listing in **Newshare w3 Index** - our online index for visitor and member use
- "Custom" HTML "Home Page" with "hyperlinks" to "Your Studio Pages" **that will hold the content you are offering**

- Internet address and eMail service
- One Free "Hyperlink" from your home page to any WWW address.

Your Link..... Your Link..... Your Link.....

Your Link..... Your Link..... Your Link.....

To Home... To W3Index... To Membership...



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If you have comments or suggestions about **Newshare Resource Center**, please email them to **feedback@newshare.com**.

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The **Newshare Resource Center** is sponsored in part by: Crocker Communications, a Northampton, Mass.-based supplier of Internet connectivity and telephone-answering services.



The Newshare(SM) Common: Top Resources Page

This is the top-level Resources Page for **The Newshare(SM) Common**. If you are already familiar with Newshare Corp. and the Newshare(SM) Syndicate, use the links below to directly browse the materials you would like to view.

If you would like to become a regular reader/user of Newshare -- or a provider of content -- start at [The Newshare\(SM\) Syndicate Welcome Page](#)

If you would like general information, please view the [Newshare Corp. Home Page](#)

During this demonstration phase, Newshare(SM) Publishing Members are offering their work free of charge to individual users for personal use. If you seek to repost, publish, forward or otherwise circulate their material to other users or to the public, you must obtain permission. All material originated from The Newshare(SM) Syndicate is copyrighted, even if available at no charge.

Enter content areas from here:

MEMBER RESOURCES:

1. [Newshare Syndicate Contributing Member content](#)
 2. [Newshare establishes LISTSERVE for free-lance writers, artists](#)
-

NEWS RESOURCES:

- [NEWS RESOURCES by content provider](#)
- [NEWS RESOURCES by geographic location](#)
- [NEWS RESOURCES by topic](#)
- [BUSINESS news / resources](#)
- [SPORTS \(teams, schools, colleges\) by type](#)
- [SPORTS RESOURCES by region \(NOT YET AVAILABLE\)](#)
- [WEATHER](#)
- [ALL OTHER TOPICS](#)
- [Non-news resources](#)
- [ADSHARE\(SM\): Advertising and Product Information](#)

The Newshare(SM) Syndicate is a service of [Newshare Corp.](#) a Massachusetts-based broker of digital information for newspapers, broadcasters and the public. If you have comments or suggestions about The Newshare(SM) Syndicate, please email them to feedback@newshare.com.

LINKS TO:

[WELCOME PAGE](#) / [RESOURCE CENTER](#) / [LEAVE A COMMENT](#)

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The Internet's first news brokerage

What's new via Newshare:

[The American Reporter -- Web-exclusive daily news without paper](#)

Newshare Syndicate Contributor Reference

Aside from hundreds of links to [Newshare Syndicate](#) is designed to showcase the work of independent Contributing Members and Publishing Members. All member-provided content is [copyrighted](#). Links to a few of our first member/providers appear below.

[THE NEWSHARE SYNDICATE](#): The Newshare Syndicate is a collaboration of independent journalists and writers who are publishing and selling their work on the Internet. Newshare carries a growing inventory of [articles](#) viewable for one-time, personal use. This content is presently available at no charge.

[THE AMERICAN REPORTER](#): The first Internet *newshare*. The Newshare Syndicate is providing on an introductory basis free access to *The American Reporter*, edited by Joe Shea, the first near-daily, general-interest U.S. "newshare" published exclusively on the Internet. The entire contents of **The American Reporter** are [copyright](#) by the authors and by Joe Shea. The *American Reporter* is reporter-owned.

[QUADNET NEWS SERVICE](#): Quadnet is an online news service representing universities and technical centers. Its summaries about science, technology, medicine, environment, business and education are presently available free to Newshare users.

[LEW IRWIN'S STUDIO BRIEFING](#): All the hottest news in television and Hollywood studios is the domain of Lew Irwin, who's five-days-a-week Studio Briefing is available to net users via the Newshare Syndicate.

[THE FREE-LANCER MAILBAG](#): Want tips on how to write news for web readers? How to pitch a story idea to an editor? Whether or not it's OK to accept tickets to an event for free? Check the archives of the Freelance@newshare.com E-mail list. It's writer-to-writer. Arranged by date of post and by subject.

[BETH'S PICKS](#): Free-lance film and arts critic Beth Saulnier offers her view on current quality entertainment. You can send her your views to beth@newshare.com.

LINK TO:

[ALL Resources](#) / [NEWS Resources](#)

If you have comments or suggestions about the Newshare Syndicate, please email them to feedback@newshare.com or use our [REPLY FORM](#).

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CLICKSHARE QUICK LINKS TO:

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How to join the Newshare(SM) Syndicate mailing list

The Newshare Syndicate launched in April a free mailing list for free-lance writers of news and other non-fiction, as well as for editors seeking to hire writers. The moderated list is a forum for exchange of information about queries, rates, ideas, markets and other professional information.

You may submit an application to be added to the mailing list by sending a query with your name, address and a few words of background to freelance-request@newshare.com. There is no charge to apply or to use the list if you are admitted.

We have also established a \$25 setup fee for those news writers who wish to register their name and up to 20 kilobytes of their work, resume or other content at the Newshare Syndicate. If you are interested in this service, send for more information to: syndicate@newshare.com.

To view a summary of the contents of our syndicate to date, click to our [What's New Page](#). An inventory of articles available for sale may be viewed by pointing your web browser to:
<http://www.newshare.com/articles/index.html>.

What writers, artists or other content providers post on the Newshare(SM) Syndicate WWW server is entirely dependent upon the marketing and financial objectives of the writer.

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[WEATHER](#) / [TOPICS](#) / [WHAT'S NEW](#) / [SYNDICATE](#) / [CLASSIFIEDS](#) / [LEAVE A COMMENT](#)



Clickshare(sm) User Membership

Clickshare(sm) is an enabling technology that will allow you, the individual user, to view and purchase information at widely dispersed Internet locations and from independent publishers -- with the simplicity of a single user ID and password.

- In some cases you will pay nothing for this information.
- In other cases you may be asked to pay a monthly subscription fee for access to a body of content.
- And in still other cases, you may be offered the chance to purchase words, pictures or sound "by the click," with payment being charged to a single account at your Clickshare(sm) home base.

All of this is possible with Clickshare(sm). The Newshare Syndicate and the Newshare Common are two users of the Clickshare(sm) system. But Clickshare(sm) as a registration, validation, personalization and payment system can be applied to the purchase of software, periodicals, documents and records, not just news.

The Newshare Syndicate is designed as a resource center for consumers and publishers . . . and as a marketing environment for artists, writers and other original content originators.

The Newshare Syndicate and Newshare Common have a goal of becoming the leading source for high-quality, timely, local, regional, national and international news and information.

Check with your favorite Internet publication or web site to see if they offer Clickshare(sm) membership. If they do not, go to our Clickshare registration site to find an appropriate topic-specific or geographic-specific sponsor.

Newshare User Membership:

Right now, membership is free. You merely register using our Clickshare(sm) three-step profiling system.

Newshare User Members will:

Have an extremely high degree of control over how news content is delivered to them and in what form...

Have access to the major centers of activity on Newshare.

Have access newspapers, publications, newsletters and other content in various forms available through Newshare.

Note: In some cases access may be fee based but not until at least Jan. 1, 1996, and you will be specifically notified and asked to authorize a change in your account status to fee-paying before this change occurs.

They will be able to select the advertising content they choose to review...

Have their online profiles and travels secure from unauthorized use...

Newshare User Membership:

Newshare User Members agree:

To view and use content for personal use only. No resale, repackaging, copying, redistribution rights of any kind are associated with your becoming a Newshare User Member.

NEWSHARE QUICK LINKS TO:

| [NEWSHARE/CLICKSHARE CONCEPT](#) | [VISION 1997](#) |
[NEWSHARE/CLICKSHARE NEWS](#) | [NEWS TOP](#) | [TOPICS](#) |
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I check or as a charge to your credit card.

To join Newshare as a Newshare User Member, please use our [Reply Form](#) or send an e-mail request to: user@newshare.com.

If you seek to post, repost, publish, forward or otherwise circulate Newshare Publishing Members or Newshare Contributing Members material to other users or to the public, or as part of a published or otherwise circulated work you must obtain permission or join us as a Newshare Publishing Member. Find out more about [Publishing and Contributing memberships](#) at Newshare right now.

All material originating from the Newshare Resource Center is (C) copyrighted, even if available at (FREE) no charge, unless marked as (PD) to signify Public Domain.

Newshare User Member membership does not require that you connect to any particular Internet service provider (although those of you in the Western Massachusetts region might consider [Crocker Communications](#)), or use any particular client software.

To learn about our plans for news personalization at [Your Newshare](#) coming soon to Newshare.

 [To Membership...](#)  [To Common...](#)  [To Corp HQ...](#)



NewshareWWW site is a service of [Newshare Corp.](#), a Massachusetts-based broker of digital information for newspapers, broadcasters and the public.

If you have comments or suggestions about Newshare Resource Center, please email them to feedback@newshare.com.

The Newshare name is a service mark of Newshare Corp.

Copyright, 1995, Newshare Corp. All rights reserved.

**Newshare Corp.
One Bank St., P.O. Box 367
Williamstown, MA 01267-0367 USA
VOICE: (413) 458-8001
FAX: (413) 458-8002
EMAIL: mail@newshare.com**

The Newshare Resource Center is sponsored in part by: Crocker Communications, a Northampton, Mass.-based supplier of Internet connectivity and telephone-answering services.



The Internet's first news brokerage

What is Newshare? A request for Proposals from ISPs/IAPs

Newshare Corp. is establishing a nationwide electronic brokerage for the multi-media collection, editing, moderation and sale of time-sensitive, general-interest local news and advertising utilizing billable hypertext links.

The Clickshare Service, owned and operated by Newshare's partner, Clickshare Service Corp., will permit content to remain on the server machines of independent content providers and yet be sold to Newshare Corp. users on a subscription or charge-per-page basis.

Geographical exclusivity offered

Internet Service/Access Providers are invited to submit requests to be considered as exclusive Contributing Members of Newshare for their geographical service area, with rights to the Newshare name and service concept.

Newshare can be used as a source of value-added content for your consumer users, as a way to derive additional, non-technical-service revenues and as a branded platform of national and international news on which to build a ground-up local news and advertising resource with the help of Newshare content-development experts.

To register as a potential technical partner of Newshare, or for more information, send your name, address and inquiry to mail@newshare.com, or use our RESPONSE FORM.

Newshare Corp.
75 Water St., P.O. Box 367
Williamstown, MA 01267
VOICE: (413) 458-8001 / FAX: (413) 458-8009
Email: mail@newshare.com
Newshare is registered servicemark of Newshare Corp.
Clickshare is registered servicemark of Clickshare Service Corp.

NEWSHARE QUICK LINKS TO:

[NEWS TOP](#) / [WORLD NEWS](#) / [STATE NEWS \(U.S.\)](#) / [LOCAL NEWS](#) / [SPORTS](#) / [BUSINESS](#) / [WEATHER](#) / [TOPICS](#) / [WHAT'S NEW](#) / [SYNDICATE](#) / [CLASSIFIEDS](#) / [LEAVE A COMMENT](#)



Delivering your share of the news

SPECIAL Newshare PUBLISHING MEMBER RATES

Here's how to become a Publishing Member:

One-Time Fee \$ 1,000.00 (SEE SPECIAL SIGN-UP NOW RATE BELOW) payable in two six-month installments. This is just the beginning of Newshare. Our goal is to take the first step . . . and then help others take it too . . .

SPECIAL SIGN-UP NOW RATE:

FOR A LIMITED TIME (until our TVS-Token Valadation System is in place) YOU CAN BECOME A PUBLISHING MEMBERS FOR JUST \$250.00.

Upon start-up of TVS the balance of your One-Time Fee will above will be due in three-equal-monthly payments.



Your Link....



Your Link....



Your Link....

Newshare Publishing Member Affiliation.

ONE-TIME FEE Covers:

Storage for the following Publishing Member provided (see Custom Hypertext Services) HTML text pages , .gif images: HomePage and up to 25 hyperlink pages consisting of member provided (see Custom HTML Services) HTML text and/or .gif images up to 1000K of data.

Please provide your materials in this manner:

Publishing Member will provide ASCII text HTML pages and .gif formatted images to Newshare on 3.5 diskette for uploading to Newshare server. All pages should be loose within a "text" folder(directory) and all .gif images

(uncompressed) should be within a "images" folder(directory) within the text folder.

Newshare Publishing Member memberships also includes:

- A 10-25 word factual description of the Publishing Member's copyrighted content in the Newshare w3 Member Index, accompanied by a hypertext "link" that will automatically connect the user to additional Publishing Member content, wherever such content is located.
- A 50-word promotional listing in the Newshare W3 Business Guide. This is a "yellow-pages"-style guide to commercial resources of Members which is in the Newshare AdShare(SM) marketplace.
- One link in the Newshare Common. All links must be to information freely accessible to the public at no charge, not just to Newshare members. No user fees, click fees or commissions may be applied to content in this area.
- Registration as a Newshare Publishing Member within the Newshare Token Validation Service (TVS) (effective mid-1995), enabling the receipt of royalty payments for copyrighted content accessed by Newshare members worldwide.

COMMISSION Agreement:

Until the Token Validation Service (TVS) server software is released for public use, Newshare Corp. shall be entitled to a commission of five (5) percent on any Newshare Publishing Member revenues derived from User Member fees; a commission of ten (10) percent on any revenues from sale of "space" on its pages for commercials, advertisements; and a commission of fifteen (15) percent on the proceeds from the sale of Publishing Member content via Newshare. An electronic subscription to the Newshare UPDATE, an eMail for-Members-only newsletter containing the latest Web intelligence and electronic-publishing advice.

Commissions relating to NewshareAdshare(SM) Agency, a national rep firm responsible for soliciting electronic advertising, product information, demonstrations and awareness materials for listing or linking to the e-pages of Newshare Publishing Members will be forwarded for your approval where applicable.

OTHER Fees:

Additional Monthly Server Space Fee.....\$1.00 per mo. per 100K

Update Files: .html file updates up to 20K that:

- are eMailed to us.....\$5.00 per file
- we have to ftp pickup.....\$3.00 per file

(please provide full file, not just the section that is being updated)

New Files (text or Image): new .html or .gif files up to 20K that:

- are eMailed to us.....\$5.00 per file
- we have to ftp pickup.....\$3.00 per file each additional ftp from same site is \$2.00.

(if ftp pickup eMail us the address and locator information)

NOTE: If you are sending us a NEW FILE you should also send us an UPDATED FILE of your HomePage with a hyperlink to it. There is no charge for a HomePage file that is updated with a hyperlink to new page content located on our server.

eMail Example:

You eMail one NEW FILE up to 20K.....\$5.00

You eMail New File and Updated HomePage.

Total.....\$5.00

eMail Example:

You eMail one NEW FILE that has an IMAGE up to 20K.....\$10.00

You eMail New File, Image File and Updated HomePage. Total.....\$10.00

ftp Example:

You have us ftp and pickup one NEW FILE up to 20K.....\$3.00

You have us ftp and pickup New File and Updated HomePage. Total.....\$3.00

ftp Example:

You have us ftp and pickup one NEW FILE that has an IMAGE up to 20K.....\$5.00

You have us ftp and pickup New File, Image File and Updated HomePage. Total.....\$5.00

NOTE: You may also send us your updated and new files on a 3.5 diskette (PC or MAC format). Please include payment with files.

All fees are in U.S. Dollars. Please make checks payable to Newshare Corp.

☐ Your Link..... ☐ Your Link..... ☐ Your Link.....

☐ Your Link..... ☐ Your Link..... ☐ Your Link.....

☐ Your Link..... ☐ Your Link..... ☐ Your Link.....

[To Home...](#)[To Common...](#)[To Membership...](#)

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If you have comments or suggestions about **Newshare Resource Center**, please email them to **feedback@newshare.com**.

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Delivering your share of the news

SPECIAL Newshare CONTRIBUTING MEMBER RATES

Here's how to become a Contributing Member:

One-Time Fee \$ 25.00

and Annual Fee of \$25.00 per year payable on sign-up anniversary date

ONE-TIME FEE Covers:

Storage for the following Contributing Member provided HTML text pages , .gif images:

Or use our easy to use Newshare HomePage Template.

HomePage and hyperlink pages consisting of HTML text and/or .gif images up to 50K.

Please provide your materials in this manner:

Contributing Member will ASCII text pages consisting of member provided (see Custom HTML Services) HTML text and .gif formatted images (uncompressed) to Newshare on 3.5 diskette for uploading to Newshare server. All pages should be loose within a "text" folder(directory) and all .gif images should be within a "images" folder(directory) within the text folder.

ONE-TIME FEE also covers:

FREE Links from:

- Free "hyperlinked" listing of 25-words or less of informational descriptive text in Newshare w3 Member Index to your Home Page.

From within the Newshare Syndicate your offerings can be browsed by potential licensees. Publishing

Members will look through your portfolio of content and services to find a style, article, artwork, etc. that they can license from you and offer in their publications, both print and electronic.

- Free "hyperlinked" listing in Newshare W3 Business Guide our online advertising message area for visitor and member use. Listing consists of a hyperlink to your Home Page and a 50-word promotional listing.

OPEN ACCESS area:

- You may choose to place a link to your Contributing Member Materials in our Newshare Common for FREE.

The Newshare Common is an open access area designed to house sample or full offerings. Anyone traveling the WWW can enter this area. No Newshare, member or user fees, click-fees, commissions, etc. are applicable within this open access area.

COMMISSION Agreement:

Until Token-Validation-Service is operational and click-fees" can be charged and credited the following commission structure will apply:

Resale Commission on Contributing Member content: 15-percent of any Contributing Member content brokered through Newshare Syndicate .

OTHER Fees:

Additional Monthly Server Space

Fee.....\$1.00 per mo. per 100K

Update Files: .html file updates up to 20K that:

- are eMailed to us.....\$5.00 per file

- we have to ftp pickup.....\$3.00 per file

(please provide full file, not just the section that is being updated)

New Files (text or Image): new .html or .gif files up to 20K that:

- are eMailed to us.....\$5.00 per file

- we have to ftp pickup.....\$3.00 per file each additional ftp from same site is \$2.00.

(if ftp pickup eMail us the address and locator information)

NOTE: If you are sending us a NEW FILE you should also send us an UPDATED FILE of your HomePage with a hyperlink to it. There is no charge for a Home Page file that is updated with a hyperlink to new page content located on our server.

eMail Example:

You eMail one NEW FILE up to 20K.....\$5.00

You eMail New File and Updated HomePage. Total.....\$5.00

eMail Example:

You eMail one NEW FILE that has an IMAGE up to 20K.....\$10.00

You eMail New File, Image File and Updated HomePage. Total.....\$10.00

ftp Example:

You have us ftp and pickup one NEW FILE up to 20K.....\$3.00

You have us ftp and pickup New File and Updated HomePage.

Total.....\$3.00

ftp Example:

You have us ftp and pickup one NEW FILE that has an IMAGE up to 20K.....\$5.00

You have us ftp and pickup New File, Image File and Updated HomePage.

Total.....\$5.00

NOTE: You may also send us your updated and new files on a 3.5 diskette (PC or MAC format). Please include payment with files.

All fees are in U.S. Dollars. Please make checks payable to Newshare Corp.

This is just the beginning of Newshare. Our goal is to take the first step ... and then help others take it too . . .

Join Newshare today . . . by going to our response form.



Your Link....



Your Link....



Your Link....



Your Link....



Your Link....



Your Link....



Your Link....



Your Link....



Your Link....



To Home...



To Common...



To Membership...



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EMAIL: **mail@newshare.com**



Delivering your share of the news

Selling your work

What writers, artists and other contributors post on the Newshare Syndicate WWW server depends entirely upon the marketing and financial objectives of the writer or contributor

For the a one-time, \$25 signup fee a Contributing Member is entitled to a year of 20 kilobytes of information loaded once (additional loadings extra), as well as listing in directory of Contributing Members (as they are called) sorted by: a) Name; b) Location and c) Area(s) of interest/expertise.



Your Link.....



Your Link.....



Your Link.....

Loading or reloading additional content will cost extra.

The Newshare Syndicate

- *Membership information.*

After the first year, an annual membership fee for an amount to be determined will be requested.

DIGESTS OR ACTUAL CONTENT: A PROVIDER'S CHOICE

Some writers may post a series of digests of work they have for sale. Others may post complete articles with a clear copyright notice that they are for "browsing only." Others might post timely articles as they are completed. Once our Token Validation Service server software is in place we will be able to track access to such content and restrict it to Newshare members or the public, as the writer requires.

Eventually, we expect that there will be many Newshare Publishing Members, who will use our TVS software on their own host servers. This will make it possible not only to track access but also to bill it to individual users at remote locations who are on Newshare-enabled machines. At this point we will offer this ability to "sell" content on a single user basis to our Contributing Members -- with an appropriate commission on the transaction payable to the Newshare(SM) Syndicate.

NEGOTIATE DIRECTLY; OR ASK NEWSHARE TO HANDLE TALKS

A writer may choose to permit Newshare to negotiate rights on his/her behalf when content users request

publication, reposting or other distribution rights beyond a single browse. Or the writer may choose to simply attach a notice to his/her content advising that use for other than browsing requires their permission and purchase (via an E-MAIL address).

YOU RETAIN YOUR COPYRIGHT

It is our intention to be a **BROKER** of content, not an **OWNER**, in the main. It is possible that in some topic areas, Newshare Corp. itself will act as a Publishing Members of the Newshare Syndicate, and so may "own" some content of its own. So individual writers are buying from us a marketing and distribution service for their copyrighted content. They are not selling copyright to us and we have no intention of making it available to anyone other than for non-archival browsing purposes.

Your Link.... Your Link.... Your Link....

Your Link.... Your Link.... Your Link....

To Home... To Common... To Exchange...



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Delivering your share of the news
The Internet's first news brokerage

What is Newshare Corporation?

Get to know us.

Newshare Background

- *Learn the who, what, where, when and why of our company.*

Newshare Scenario

- *A look into your news reading future.*

Newshare Founders

- *The people who helped us get up and running.*

Newshare Concept

- *The Newshare concept.*

Newshare Partnerships

- *An invitation to content providers to join us.*

How to become a Newshare Member

- *Two ways to offer your content for compensation.*

 [To Home...](#)  [To Common...](#)  [To Membership...](#)



Newshare WWW (World Wide Web) site is a service of **Newshare Corp.**, a Massachusetts-based broker of digital information for newspapers, broadcasters and the public.

If you have comments or suggestions about **Newshare Resource Center**, please email them to **feedback@newshare.com**.

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The Internet's first news broker
Delivering your share of the news

Welcome to Newshare Corp.

We are a Massachusetts-based supplier of interactive media products to [newspapers](#), [broadcasters](#) and the public through the [Clickshare\(sm\) System](#) for billable hypertext links, the [Newshare\(SM\) Syndicate](#), the [Newshare \(SM\) Common Resource Center](#) and, next year, [Newshare\(SM\) Adshare](#). The pages linked below describe our corporate mission.

Some of the links you'll find here are intended only for those who have signed our [non-disclosure agreement](#). If you're interested in [Newshare's](#) future, we invite you to sign and return one.

Newshare Corp. is establishing a nationwide electronic brokerage for the multi-media collection, editing, moderation and marketing of time-sensitive, general-interest news and advertising. Material will be organized both geographically and by interest area for direct consumer use. Content-provider memberships to **Newshare** are available. Tentative pricing information is available at the [Newshare Syndicate Member Info](#) page. User membership is presently free.

The service architecture of **Newshare** is based on, and draws its strength from, the Internet's ability to support a distributed network of providers and customers as well as open interfaces.

Newshare Corp. is seeking potential content partners or affiliates through a [Request For Proposals](#) process. We are very interested in developing relationships with non-traditional news providers (such as Internet newsgroup operators, BBS operators, small news organizations, Internet Service Providers, magazines, specialty information providers and entrepreneurial individuals and companies whether large or small, for-profit or not-for-profit) as well as with traditional media enterprises.

For more information about **Newshare**, please select from the following:

- [WHO is Newshare?](#)
- [WHAT is Newshare?](#)
- [WHERE is Newshare?](#)
- [WHEN is Newshare available?](#)
- [HOW will Newshare work?](#)
- [WHY is Newshare needed?](#)

- Is there ANYTHING like Newshare now?

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FAX: (413) 458-8002

EMAIL: mail@newshare.com

Services Available to the Media



Newshare Corp. is offering partnerships and affiliations with smaller newspapers and radio stations seeking to offer their content on the Internet. See this [Request for Proposals](#) for more information.

Among services which we expect to make available in first-quarter of 1995:

-- Turnkey formatting and technology services. **Newshare Corp.** will manage the establishment of a media outlet's connection to the Internet and will provide access to **Newshare's** news content in exchange for access to the affiliate's news content.

-- A bulletin-board service for delivery of marketing information about **Newshare(sm)** and for local newspapers to sponsor inbound 900 or local-dial service over which they can provide local news to their print subscribers via a computer and a modem or by on-demand "faxback."

-- Connection to the Internet for sending and receiving electronic mail directly into an editorial front-end system or to a fax machine.

FOR MORE INFORMATION CONTACT:

Bill Densmore, President

Newshare Corp.

One Bank St., P.O. Box 367

Williamstown, MA 01267 USA

Phone: (413) 458-8001

Fax: (413) 458-8002

Email: info@newshare.com

Consumer Scenario



How will a consumer subscriber make use of their customized "Newshare(sm)"? Here is a scenario.

A computerphobic person wakes up in the morning, turns to bedside PC, which by this time is also a television set. Through some autoboot routine, they reach the home page of Newshare Corp. During the night a custom **Newshare(sm)** has been printed for this reader on their consumer-grade, color inkjet printer -- from 10 to 20 pages.

The subscriber can sip coffee or tea at the breakfast table and read his **Newshare(sm)** in print form. Perhaps, however, there is a story in today's news with a compelling visual element.

Click! The subscriber requests a video clip of the event from his computer and, after waiting a minute or so, the clip is played, with sound, on his computer screen. He may have already requested the delivery during the night of the top five video news clips of the day, in which case they will be instantly available.

It's time to take a shower and the subscriber wants a five-minute summary of the major news to supplement his breakfast-table reading of in-depth material and the video clips of visual events.

Click! The subscriber requests a preloaded five-minute summary supplied by National Public Radio or another content partner. Perhaps he listens to the local news report from a small radio station in a college-age child's campus town 2,000 miles away. Or it might be an actuality (audio report) of a particular news story the subscriber finds interesting. Or it might be a lineup of half a dozen actualities of the top stories of the day.

The audio facility gives the **Newshare** consumer the opportunity to move about while listening to the news or information -- information which is customized rather than in a format dictated by a network.

The entire package, or pieces of it will be consumer- selectable to include or omit advertising. When configuring their personal service, the **Newshare** subscriber will select the commercial or non-commercial version, paying a significant access fee depending on his or her choice. The subscriber will also have the option of requiring that no individual demographic or usage information be gathered by **Newshare** or its affiliates and "unlist" a user address, gender or other profile information.

Billing charges by credit card or electronic-funds transfer will be adjusted by the time of service (advertising or non-commercial) requested. Affiliate content providers will be automatically provided with a pro-rata share of access fees.

Subscriptions will be available by June 1. No price has been established.



CLICK 201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Oliver, et al.

Serial No.: 09/036,236

Filed: March 6, 1998

For: SYSTEM FOR MANAGEMENT OF TRANSACTIONS ON
NETWORKS

Examiner: Jeffrey A. Smith

Art Unit: 3625

October 3, 2005

Hon. Commissioner of Patents and Trademarks
Washington, DC 20231

THIRD DECLARATION OF
WILLIAM P. DENSMORE JR.

I, William P. Densmore, Jr., do hereby declare:

SUMMARY

1. I have served as president of Newshare Corp. continuously since the company's formation in 1984 to the present. From the formation of Clickshare Corp. in 1995 through approximately May, 1996, I served as president of Clickshare Corp., and thereafter to the present except for a period of a few weeks. Separately or jointly, these two companies owned or were assigned all rights in the Clickshare service until Nov. 15, 1997. During 1994-1997 I was the principal executive in charge of the companies' marketing, promotion and operational strategies.
2. In this affidavit, I will provide a general perspective on our information-disclosure practices during the period 1994-1997, reference some specific documents or web postings not previously noted by the Examiner, and comment on some of the specific assertions or citations made by the Examiner in an office action dated June 3, 2005.

GENERAL COMMENTS

3. Because of software-development delays, the Clickshare Service was not ready for patenting, not commercially available, and was not offered complete for sale -- at any time prior to March 7, 1996. Statements made prior to that time were promotional activities designed to attract potential investors and to develop a list of prospective customers to whom an offer could be made when the service was finally made available. Substantial code was developed throughout 1995, but was not field-tested and it did not include a key component -- the "Settlement Service," or accounting function. (See Exhibit A, attached).
4. While we conceived of the invention in November, 1994, and had portions of the prototype code working and were testing it in the March, 1996 time frame and earlier, we had not completed the Settlement Service code which would have been necessary to offer a complete transaction service, until months or even years later.
5. Public statements, such as news releases, were always written to avoid specifics of the invention and with the intention of developing market interest in the Clickshare concept of distributed user management and multi-site transactions for the purpose of raising investment capital and securing strategic partners. Website postings, to the extent they may even be judged "published" material under patent law, similarly avoided detailed technical description, but focused rather on the feature or benefit provided.
6. Never during the period prior to March 7, 1996, did we ever indicate we could deliver a complete system, nor did we offer any such system or method for sale or public use. When we talked about pricing, it was in the context of "joining" an evolving network of sites, typically with fees waived for the first year because no transactions could or would be settled. We described it as "alpha" or "beta".

REFERENCES NOT CITED BY THE EXAMINER

7. Filed with the provisional patent application, at Pages 51-62, is a photocopy of an Aug. 18, 1995 email from David Oliver to Bill Densmore and Lynn Duncan. At Page 52, there appears the hand-written notation, "DELAYED" in the margin, with an arrow pointing from the phrase, "This server, and the Clickshare backbone that supports it, is being made available to

a small group of content providers for alpha-stage use on September 1, 1995.” I contemporaneously wrote the word DELAYED prior to submitting the provisional application to our patent lawyer in late 1996 or early 1997 for filing to make it clear we were behind schedule, even at that time, in developing or deploying the complete system.

8. On May 6, 1996 we caused to be transmitted a news release in which we announced the Christian Science Monitor was going to use Clickshare on its website “initially for audience measurement, with microtransactions to follow” (Provisional Application, at page 32). In the release, we quoted a Monitor spokesman as saying that “microtransactions from individual articles will start in the fall” This was a marketing or strategic partnership. There was no sale. No money ever changed hands with The Monitor. In addition, I was told by our engineers (principally Dave Oliver and Michael Callahan) that we did not have operational elements of transaction settlement coded or in place. Internal emails show diligent work continued on many aspects of the system throughout the summer of 1996, in order to make it ready for use on the Monitor web site in September, 1996.
9. The document “Clickshare at-a-glance” dated September 15, 1996, and filed with the provision patent application (at Page 27) includes under the heading Significant Customer Alliances this sentence: “The Christian Science Monitor is using the Clickshare Service to track users of its top-rated news site and, shortly, to vend archival stories on a “per-item” basis.” This statement is consistent with a March 14, 1996 letter to the Monitor’s web manager (attached hereto as Exhibit A). In that letter, dated less than one year prior to our provisional filing, it is disclosed that no money is to be paid by the Monitor and that the service proposed is only tracking of users and no payments. Both of these references make clear we did not contemplate and did not sell transactions handling to the Monitor before or immediately after the period one year before our application filing.
10. A “Technical Description” of the Clickshare Access and Payment System, dated April 3, 1996 and filed with the Provisional Patent Application (at pages 19 and 20), is marked CONFIDENTIAL and describes a Settlement Facility as follows: “The Transaction records stored in the Logging Facility are used to drive the process of settlement among publishers. In this process, transactions are matched to the “vending publisher” and upon accumulation the account of the “owning publisher” is debited according. NOTE: The Settlement Facility was architected by Newshare, but not implemented.” [Underlined emphasis added] Without the

Settlement Service, it would not have been possible at least as late as April 3, 1996, to sell the working service to anyone.

11. A November, 1996, article published in the magazine "Webmaster", authored by Boston technology writer Fred Hapgood, entitled, "Pennywise," (provisional application, at pages 38-39), discusses the Clickshare relationship with the Monitor. It quotes Bill Densmore as saying that "he expects to start a full trial of the Clickshare micropayments system with The Christian Science Monitor before the first quarter of 1997. However, according to David Creagh, the Monitor's electronic publishing manager, what the Monitor likes in Clickshare is not the payment options but rather the sophisticated monitoring functions." These two statements infer what was in fact the case – that we had not deployed as late as November, 1996, the transaction-settlement function.

EXHIBIT CITATIONS BY THE EXAMINER

12. Examiner's Exhibits A-P contain many references to "alpha" and "beta" testing. We were (and are) developing a large-scale distributed user management and transaction system for the Internet. Something like that cannot in any practical way just be offered for sale one day complete. It is the product of interaction with potential strategic partners.
13. Regarding Examiner's Exhibit A, the Business Wire release of Sept. 15, 1995: "Early next year" refers without specificity to some date in 1996. David M. Oliver is quoted as saying, "While the system as introduced at beta will be capable of handling payment transactions, we want to give it a workout before doing so." In fact, I recall, that the system was never capable of handling payment transactions at least through the summer of 1996. The release says we were "accepting applications from publishers and ISPs for beta testing commencing in late fall." In fact we received no such applications as a result of this announcement.
14. Regarding Examiner's Exhibit B, a Gale Group Dialog/NewsBytes story dated Sept. 15, 1995: The story is prospective in stating Newshare "will begin a beta test phase" with no date specified and states, without attribution, "The software will be available in early October, with the evaluation phase beginning in mid-October." The story adds, without attribution: "After Jan. 1, 1996, when the transaction processing function goes online, an ISP will need to enroll as a Clickshare 'technical member' for a membership fee of \$100, plus \$1.00 per year

for each Clickshare enabled user.” This exhibit is a story written by an independent news organization, not a news release from Newshare Corp. Hence unattributed statements cannot be taken as statements of Newshare Corp. In fact, the software was not available until, at the earliest, the time of testing with the Christian Science Monitor in summer/fall of 1996, and even then without the settlement-service component(s).

15. Regarding Examiner’s Exhibit C, a Dialog archive of an Oct. 30, 1995 news story published by Internet Week: This brief states that “alpha” (*n.b. -- not beta*) testing is underway, without reference to any use by, or sale to, any customers. It says the software “is due out in early 1996”, with no specific date given beyond that.
16. Regarding Examiner’s Exhibit D, a Dialog archive of a Sept. 18, 1995 news story carried by M2 Communications Telecom World Wire: This brief provides no indication of any offer for sale or sale, gives no information about any pricing, refers only to a general “package” and gives no dates. It is merely a brief and generalized description of the problems the Clickshare service hopes to solve.
17. Regarding Examiner’s Exhibit E, a Dialog archive of a Sept. 15, 1995 story carried by M2 Presswire: This is a news story, not a news release, although it appears based upon a company release. It states “the company announced it is beginning private alpha testing of the software with a handpicked group of content providers (emphases added). This language implies a closed test, and there is no indication of any sale or money changing hands. The story’s last paragraph states “Clickshare server software for publishers and Internet Service Providers will be available for a free, 90-day evaluation”. (emphases added). This statement relates to server software only, with no indication that other components of the system would be operated. There was no sale or offer for sale, since the proposal is for a free evaluation. And the paragraph gives no date when the evaluation “will be” available. There is nothing to indicate it was available at the time of the story.
18. Regarding Examiner’s Exhibit F, a Dialog archive of a Sept. 12, 1995, story from the NewsBytes news service: This story says, without attribution, that Newshare Corp. is “about to” unveil a new software product. There is no indication when. There is nothing else in the story which mentions customers, price or offers for sale.

19. Regarding Examiner's Exhibit G, a printed download of a page from the newshare.com webserver, which currently responds (as of May 25, 2005) to HTTP requests to the newshare.com domain. The page is:

<http://www.newshare.com/Newshare/Members/Publishing/MAR95PubRates.html>

There is nothing on the page, which indicates operational status of a system. In fact, there is the following sentence under the heading: Commission Agreement: "Until the Token Validation Service (TVS) server software is released for public use" This is consistent with the fact the software was not operational at that time.

20. Regarding Examiner's Exhibit H, a printed download of a webpage from a third-party website which caches a Dec. 7, 1995, letter from me, as president of Newshare Corp., to U.S. Rep. Rick White regarding the transmission of so-called "offensive material" on the Internet. The letter states: "Newshare Corp. and its Clickshare Corp. affiliate have developed the first functioning system for enabling the emergence of a free-market for digital information." The letter says nothing about deployment or operation of such a service and the service is not particularly or specifically described other than as "the transfer of micro-transaction settlement and audience-measure data among multiple, independent publishers."

21. Regarding Examiner's Exhibit I, a printed May 25, 2005, download of a webpage cached at The Internet Archives and appearing to be a page from the Clickshare Corp. website cached as of Oct. 8, 1999. The page appears to have been created prior to Jan. 1, 1996, based upon a statement within its text: "Until Jan. 1, 1996" The page is headlined: "Clickshare Registration" and the first two sentences read: "You're Registering to get your Personal Newshare at American Newshare. You have reached the first of three pages requesting information necessary for you to become a registered user of the Clickshare Publishing System." This was a registration page for our "Personal Newshare" service, a functional precursor to "My Yahoo" – which provided links to topical and geographic references on the web. We designed it to gather a base of users to whom we might later choose to market a multi-site transaction service when it became ready for sale. The "Until Jan. 1, 1996, credit-card information is not required" confirms our inability to manage any transactions at least prior to that date. In fact, it was not until September, 1996 that we could handle any transactions.

22. Regarding Examiner's Exhibit J, a printed May 25, 2005, download of a webpage cached at The Internet Archives on Dec. 2, 1998, and appearing to be a page from a Clickshare Corp. website headlined: "What is Clickshare: A Short Summary." Two sentences state: "the Clickshare service requires publishers to use Newshare's Clickshare-enhanced HTTP server, which registers and profiles users at a single publishing site. After Jan. 1, 1996, this software is provided free under license. It is available now to qualified users as a beta product." Neither of the sentences says anything about transactions or settlement. They say nothing about any offer for sale and nothing about any pricing. Indeed it states that software will be provided free and is available to qualified users as a beta product. (emphasis added). The use of the phrase "qualified users" is consistent with the fact that we were dealing with test users, not customers, no money was intended to change hands, and we would exercise judgment about qualifying the users. In short, all the trappings of an internal test, not a public use.
23. Regarding Examiner's Exhibit K, a printed May 25, 2005, download of a webpage cached at The Internet Archives on Jan. 27, 2002 and appearing to be a page from a Clickshare Corp. website headlined: "Building a free market for digital information: Audience Measurement with the Clickshare Service." This is a web version of a presentation for a Feb. 22, 1996 conference in San Francisco. Nothing in the presentation indicates an operational system or an offer for sale, although there is a link to a "Publisher Enrollment Packet" which is no longer accessible on the web. The presentation states there has been a "demonstration operational since October 1995 (emphasis added); that "alpha" testing is underway, and "beta testing expected 2Q 96" of "basic authentication, registration, personalization." It says, "ACH settlement began testing Feb. 21." And on an earlier page, it states: "Clickshare is working in alpha now . . . [s]ettlement of micropayments will begin by QT3, 1996." (emphasis added). Citations are to alpha testing only, there is no indication of any settlement of payments or even charging, which is to start beginning after May 31, 1996 ("QT3"), which would be less than one year prior to the date of the applicant filing date.
24. Regarding Examiner's Exhibit L, a printed May 25, 2005, download of a webpage cached at The Internet Archives on Nov. 12, 1996 with a web-page title of: "Clickshare: Frequently Asked Questions." The third paragraph of the first answered question reads: "The Clickshare facility to be demonstrated in October by Newshare Corp." (emphasis added) The context of the document suggests this was intended as October 1995. In answer to the question: "Who is among Newshare's Publishing Members?" the document reads, in part: "We have not

begun to formally enroll or announce our Publishing Members...." (emphasis added) The suggestion that a facility might be demonstrated at a certain point of time falls far short of saying it will be operational or even built. Likewise, while this exhibit contains some speculative statements about contemplated pricing, there is no offer of sale. The overall impact of the FAQ is a general description of the features and benefits of a deployed system, without any indication of when or how it will be deployed and no technical specifics of how it might work.

25. Regarding Examiner's Exhibit M, appearing to be a cached version of a reposting by Red Rock Eater Digest of an Oct. 23, 1995 news release transmitted via email by Newshare Corp. The page is now found at:

<http://wasearch.loc.gov/sep11/20011113090452/http://commons.somewhere.com/rre/1995/online.privacy.html>

The lead paragraph reads: "Newshare Corp. begins shipping to selected publishers this week the alpha version of its breakthrough Clickshare system to track and settle Internet-wide microtransactions." The release states that "[t]ransaction-handling capabilities, and an initial base of Publishing Members, will be launched in early 1996." There is no more specific date provided. In fact, I recall that we did not ship any software to any publishers, because none requested it. Another sentence states: "Clickshare requires no special software for consumers beyond their web browser and costs a publisher as little as \$795 to join." (emphasis added). Note the use of the word "join" as in joining a network, not acquiring or licensing software. There is also no specific offer to join, only a statement of the range of what joining costs.

26. Regarding Examiner's Exhibit N, this appears to be a cache from a third-party website of an email update sent by Newshare Corp. on Sept. 15, 1995. This email, styled to read like a news release, has the following headline: "One-bill, Universal-password access to Internet information available by subscription or "by click" early next year, via Newshare Corp.'s "Clickshare" publishing system" (emphasis added) The release begins: "Internet users will be able early next year to purchase information "by the page" from a wide selection of independent publishers with one-bill, one-password simplicity under a system announced Friday by Newshare Corp." This use of "early next year" (meaning early in 1996) is consistent with other statements and was intended by us to be somewhat vague because we didn't know for sure when coding of all of the elements of the service would be completed.

In fact it was not completed until September 1996. The news release goes on to say alpha testing will begin “after Sept. 29.” (“after” confirmed our uncertainty about the exact date), with “beta” testing in “late fall” of non-transactions. Technologist David M. Oliver is quoted as saying: “While the system as introduced at beta will be capable of handling payment transactions, we want to give it a workout before doing so.” In fact full transactions-handling capabilities were not ready until September 1996. Clickshare publishing member pricing is noted as “tentatively at \$795.”

27. Regarding Examiner’s Exhibit O, a cache of the same Oct. 23, 1995 document referenced in Exhibit M, above, except found on a different site using Google Groups.
28. Regarding Examiner’s Exhibit P, printed May 27, 2005, a cache on The Internet Archive made Jan. 28, 1998 and appearing to be a page placed sometime in 1995 on the Newshare Corp. website, headlined: “Newshare Interim Publishing Member Enrollment Information.” Besides stating other services and benefits of becoming a member of what is described as “The Clickshare Publishing System”, the document offers “a 50% discount off the one-time, \$795 enrollment in membership in the Clickshare Publishing System. A Clickshare-enhanced server daemon, when launched on the Internet server where your content resides, will allow” The page mentions that charter membership is free and “at present we are accepting reservations for memberships to start after Jan. 1, 1996.” There is no indication that any software is included or what specifically comes with membership. While the wording is slightly ambiguous, the “when launched” terminology was intended to state that the service and daemon were not available at the time the page was written and posted.

CONCLUSION

29. Based on my review of the Examiner's exhibits, other relevant documents, and my own firsthand recollections of the 1994-1996 time-period, I affirm that:

- Public-relations statements and literature overwhelmingly were written with non-specific statements about availability, and usually with the statement that transaction-handling capabilities were a future event.
- No websites ever exchange any transactions until Sept. 16, 1996. On that date, Clickshare Corp. issued a news release via Business Wire, attached hereto as Exhibit B.

Further Declarant Sayeth Not

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon.

Signed this 3rd th day of October, 2005.



William P. Densmore Jr.
1182 Main Street
Williamstown MA 01267
413-458-8001
Densmore@ncwshare.com

EXHIBIT A

EMAILED LETTER TO CHRISTIAN SCIENCE MONITOR

Date: Fri, 15 Mar 1996 02:30:10 -0500 (EST)
From: Bill Densmore <bill@newshare.com>
To: Dave Creagh <creaghd@moses.csps.com>
Cc: Bill Densmore <bill@newshare.com>, David M. Oliver <dave@newshare.com>,
Michael Callahan <michael@newshare.com>, Felix Kramer <felixk@panix.com>
Subject: MONITOR LETTER: v2.0 -- minus legalistics

Dave:

Here's a near-final draft of the letter we are getting out to you. I'm afraid I have slipped on our self-imposed deadline.

Watch later today (Friday) for the draft news release, the contract and the fee chart referenced in the material below.

Thanks for your extra 24 hours of patience!

-- Bill

+-----+
| Bill Densmore -- Chairman/CEO CLICKSHARE CORP. |
| 75 Water St., P.O. Box 367 densmore@clickshare.com |
| Williamstown MA 01267 USA 413 458-8001 |
| Building a free market for digital information //www.clickshare.com |
+-----+

March 14, 1996

Mr. David M. Creagh
Manager, Business Development
The Christian Science Monitor
1 Norway Street
Boston MA 02115-3195

Dear Mr. Creagh:

This letter represents our formal proposal to provide the Clickshare Access and Payment Service to the Christian Science Monitor's (CSM) debuting web site. Accompany this letter is a service contract for your review and signature and a draft news-release announcing our relationship, once confirmed. This letter describes generally the scope of the relationship, the revenue opportunities to The Monitor and the costs to you.

We are taking the view that while we have something of significant value

to CSM, it is appropriate for us to "front-load" our service commitment and defer collecting any fees (*emphasis added*) (with the exception of audience-measurement fees) for one year until actual revenue streams are created for you.

It is our hope that this letter, along with the draft contract and newsrelease, can form the basis of an "Agreement in Principle" to go forward, subject of course to a review of the contract terms by both of us.

SCOPE OF RELATIONSHIP

This agreement proposes to involve both Clickshare Corp. and Newshare Corp. (which share overlapping ownership). The legal and financial relationship will be with Clickshare Corp. An additional, collaborative relationship will exist with Newshare Corp. (with no contractual obligations on either side and no present exchange of consideration). This is described to you in a separate letter from Newshare Corp., enclosed.

Clickshare's objective is to provide The Monitor with a working, beta Version (*emphasis added*) of the Clickshare Access and Payment System that will allow The Monitor to track its registered users access to designated Monitor site resources as well as their viewing of other content in the Clickshare universe. The purpose of this anonymous tracking (Monitor will at all times be the sole repository of names/addresses/demographics of its users) will be to:

- * Position The Monitor to effectively collaborate with other premium news sites worldwide by linking users and content, both free and chargeable.
- * Assist Monitor and any Monitor-designated audience-measure service (such as I/Pro) to independently verify Monitor claims as to advertising and page views.
- * Develop a base of knowledge and information for personalization efforts
- * Enable the sale of premium content on a charge-per-item ("per click") basis if and when desired.

Clickshare management of the Monitor site in no way locks you in to a "per click" model of content sale. It merely makes this a viable option, while at the same time enabling true independent audience measurement and multi-publisher personalization and sharing of information and users.

What has to happen to make this "Agreement in Principle" a reality?

WHAT WE ASK YOU TO DO

- * The Monitor must agree to the installation of the Clickshare Web Publishing Server on its web site. This server is a plug replacement for

the NCSA server you are now using. You may incrementally add the Clickshare features to portions of your web site as you see fit. The Clickshare server provides for the broadest choice of information vending models simultaneously -- from free, untracked, unregistered content to fully restricted information charged by-the-click. Any dynamically-generated text, sound or visual files can be handled.

* The Monitor must reach a contractual agreement within approximately 30 days with Clickshare Corp. which includes a delineation of minimum terms of service for end-users and financial responsibility for both the purchase and sale of information. A draft contract is enclosed and we recognize that this will require some give-and-take which is entirely possible and appropriate since you are our first major member newspaper.

WHAT WE PROMISE TO DO

Clickshare Corp. will:

* Provide to the Monitor site a free copy, under license, of the Clickshare Web Publishing Server. Clickshare will commit the technical resources of either or both of David M. Oliver and Michael J. Callahan to ensure that installation of this software is trouble-free for you, your staff and service provider -- and completed in a timely manner. This commitment will be at our expense.

* Beef up the existing Clickshare Authentication and Logging Service with redundant capacity on a separate Internet backbone from our current Sprintlink T-1 connection (i.e., BBN Planet or MCI) to ensure that authentication will be reliable.

PRICING (GENEROUS BUT FIRM)

Monitor will be expected to pay a 15% fee on any sales of content to non-Monitor Clickshare users, but this will be deducted from the 85% of the wholesale price charged, so if Monitor is paying 1.5 cents as a fee for realizing the sale of a 10-cent article, it is also netting 8.5 cents with no other acquisition or marketing cost. Monitor will have complete authority to set wholesale pricing for its content at whatever level (below \$2 per item) it wishes.

Monitor's first-year Clickshare Publishing Membership (foundation price of \$795) will be waived completed.

Monitor's first-year per-user enabled fees (foundation price \$1 per user per year, payable quarterly), will be deferred and paid only as a charge against second-year transaction revenues. They will never be payable in cash.

Monitor will be expected to pay a fee charged on a "per click" basis for each report of an access to its web site which it requires for audience-measurement purposes. The fee will be 1 cent per reported access

for the first 10,000 records per month, then 0.5 (one-half) cents per record for the next 10,000 records, 0.25 (\$.25) cents per record for the next 80,000 records; then 0.10 (\$.001) cents per record for each record above 100,000 accesses reported per month. Free content not requiring tracking by Clickshare will not be subject to this fee.

Dave, the relationship we are undertaking is going to require a significant amount of give-and-take. We want to work with you because you see the importance of asserting that well-edited news has value and that people should be expected to pay for it. And you were one of the earliest people to perceive the "1+1=3" value of a community of affiliated but independent publishers sharing news and users worldwide -- the Newshare concept enabled by the Clickshare technology.

Let's put our heads together and make this work now!

Best regards,

Bill Densmore

Chairman/interim CEO

EXHIBIT B

KEYWORD: MASSACHUSETTS

INDUSTRY KEYWORD: INTERACTIVE/MULTIMEDIA/INTERNET COMED
COMPUTERS/ELECTRONICS PRODUCT

BW0434 SEP 16,1996

WILLIAMSTOWN, Mass.--(BUSINESS WIRE)--Sept. 16, 1996--Clickshare Corporation's pioneering multi-site, single-ID, Internet micropayment system went live on Friday as users began clicking on -- and paying for -- information online.

Purchases from Friday to Sunday by over a dozen first registrants totaled \$62.60.

"We're the web's first working multi-site distributed user-management and micropayment service," said Bill Densmore, Clickshare's chairman. "Now publishers can charge for valuable information on the Internet, rather than giving it away."

"Now that 'The Internet's Information Utility' (sm) is up and running," said Felix Kramer, Clickshare marketing director, "We'll finally see whether people will buy information by the click."

Typical articles from a test archive of domestic and international articles from The Christian Science Monitor were "Ground Personnel: Gap in Airport Security System" and "Africa South of Sahara boasts dictators and wide political freedom" (daily indexes \$0.10, articles \$0.25). Lead story in the entertainment industry intelligencer Studio Briefing (\$0.50) was "Job Jitters at Turner" (as the merger with Time Warner proceeds). And the American Reporter, the Internet's first digital daily, also \$0.50, featured its worldwide Pinkerton Risk Assessment, and an exclusive report on "Pollution by Super-Size Hog Farms Feared Across Illinois."

Clickshare allows users to have a single ID and password, yet gain access to multiple web sites. It uses the company's proprietary Digital Calling Card (sm) technology to track user movements and settle charges. Its software is a server add-on, not a user application.

Users can now sign up once, give a credit card online or offline, log in once per session, and, while preserving their privacy, buy information -- for a dime from one place, a quarter from another unrelated site. At the end of the day, they get an e-mail summary of where they've been and what they've bought. And the purchases show up on their next credit card statement.

"Soon, charges may be on phone, cable, newspaper or Internet Service Provider bills," said Densmore. On the Clickshare web site, publishers can now see samples of aggregated bills, where revenue streams are shared between publishers and service providers.

"Clickshare is designed to scale to a very large number of users and a very high volume of transactions using a distributed architecture, including no single centralized database of users," said Dave Oliver, Clickshare managing director/technology.

"What we want to do has been difficult," said David Creagh, electronic publishing manager at the Christian Science Monitor. "Clickshare makes it easy. We're starting with demonstration content to prove it all works, because we've not completely resolved pricing and other issues. We want e-Monitor users to be able to register once, be re-authenticated transparently, and then have their mouse trails be captured and then streamed to our traffic report vendor, our auditor and the transaction people. One data stream, low overhead. Clickshare is the only product that allows us to do this."

Next, Clickshare will sign up additional content providers, link with strategic partners, and recruit an experienced management team. The privately held company was founded in 1995 by Densmore, a veteran journalist, Oliver, a networking expert, and Michael Callahan, a mathematician and software developer.

More information is on the web at www.clickshare.com or by sending blank e-mail to info@clickshare.com.

CONTACT:

Felix Kramer, Kramer Communications, felix@clickshare.com, 212/866-4864; Bill Densmore or Lynn Duncan, corp@clickshare.com, 413/458-8001; Dave Creagh, The Christian Science Monitor, dave@csmonitor.com, 617/450-2865

KEYWORD: MASSACHUSETTS
INDUSTRY KEYWORD: INTERACTIVE/MULTIMEDIA/INTERNET COMED
COMPUTERS/ELECTRONICS PRODUCT
BW0434 SEP 16,1996

EXHIBIT C -- Aug. 5, 1999, memo to CSC directors

Excerpts from an Aug. 5, 1999 internal memo to Clickshare Service Corp.'s directors, written by Bill Densmore and marked "CONFIDENTIAL."

We can show that we described our system internally in November 1994, described it confidentially to potential (but unrealized) partners/investors in at least December 1994 (ATV), Aug. 1995 (MCI), and April 2, 1996 (IBM), completed in code the key components of the system and had them working together on Oct. 4, 1995 (internal Email) and gave a prospective partner a working version of the client code in April 1996 (IBM). Our patent application was filed March 7, 1997.

-- SNIP --

WORKING CODE

The two main components of Clickshare were developed into working code during 1995. The server backend was reduced to practice in early 1995 at a date which can be more precisely fixed with more detail review of old Email. The client-side code became operational in conjunction with the server on October 4, 1995 (*Internet email to Clickshare/Newshare collaborators, Oct. 4, 1995, Oct. 12, 1995*). About a week earlier, David Oliver described operational status in a detailed Email (*Subject: State of affairs, Sept. 29, 1995*). He describes the server, the transaction logging backend, the user-registration front end, the personalization CGI scripts as all operating with the only missing component the HTTP client, which became operational on Oct. 4.

IBM CONTACT -- 1995/1996

Among the parties with whom we disclosed and discussed our detailed technical description were MCI and IBM. Both signed non-disclosure agreements before we provided the material for their review. In the case of IBM, we actually supplied IBM's InfoMarket unit (then run by Jeff Crigler) with an operational version of the Clickshare Token Validation Service client, which they requested on April 16, 1996. They took the software, ported it to and ran it on the IBM AIX Unix platform at InfoMarket's Falls Church, Va., offices. We discussed and proposed licensing terms but they never responded concretely to those terms, although they did propose very generally that IBM operate the Clickshare backend. There was no followup. This all occurred in the Sept. 1995-April, 1996 time frame. For example, InfoMarket's Jeff Crigler and John Kalb, then with IBM's transactions unit in Hawthorne, N.Y., met with Bill Densmore, Dave Oliver and Michael Callahan on April 2, 1996 at the law offices of Foley Hoag & Eliot to discuss the Clickshare technology and terms for a possible alliance (which was never consummated). This was the day before the MSFT patent application was filed, and 11 months before the Clickshare patent application was filed.

Jan 14 05 02:49p Milde & Hoffberg, LLP

(914) 949-3416

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CLICK 201.2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Oliver, et al.
Serial No.: 09/599,163
Filed: June 22, 2000
For: MANAGEMENT OF TRANSACTIONS ON A NETWORK:
FOUR OR MORE PARTIES
Examiner: Nga B. Nguyen
Art Unit: 3628

August 12, 2004

Hon. Commissioner of Patents and
Trademarks
Washington, DC 20231

Dear Sir:

DECLARATION OF DAVID M. OLIVER
WILLIAM P. DENSMORE, JR., AND MICHAEL J. CALLAHAN

We, David M. Oliver, William P. Densmore, Jr., and Michael J. Callahan, do
hereby declare:

1. We are the named inventors of the above patent application.
2. We submit this declaration in support of a demonstration of a prima facie entitlement to priority of invention with respect to Teper, US 5,815,665, claims 35-80 of which have been copied in the present application.
3. Attached are a compendium of and articles published between September 18, 1995 and September 23, 1996, which are more fully identified therein. These are believed to be true and correct excerpts of these articles.

4. These excerpts, together with the 1995 Oliver memo, are believed to support applicants' claim of invention prior to April 6, 1996, the effective application date of Teper et al.

5. The Clickshare™ service was experimental at all times at least prior to March 7, 1996. The system was made available under an "alpha" test, in which users were able to test compatibility with their Internet browsers, and certain aspects of system operation, in order to provide feedback to Newshare (and later Clickshare) regarding operation of the system and any errors encountered. During this "alpha" test, no content was available for purchase, and no user accounts were charged. User registrations, to the extent possible, were performed through Clickshare servers, and therefore there was no segregation of service provider and on-line provider.

6. The Clickshare™ service was not offered for sale at any time at least prior to March 7, 1996. No commercial terms for users, brokers, or service providers were established, and the system was incompletely developed. Unsolicited offers for sale or commercial use of the system were not accepted. No mechanism was established prior to March 7, 1996 for accepting clients nor customers.

7. An article published September 18, 1995 in **Stop The Presses**, by Steve Outing, Planetary News LLC, states as follows:

Clickshare Internet Publishing Scheme Looks Promising

...The Clickshare system monitors and collects data on where the consumer has visited and purchased information, then sends the data back to the home publisher and the remote publisher. The remote publisher receives his share of the sale, the local publisher keeps a slice in compensation for the referral, and Newshare keeps a portion. And the participating publishers receive a detailed accounting of what consumers are reading, which can serve to provide advertisers with a verified account of online viewership.

The Clickshare concept has some wise thinking behind it. President Bill Densmore, a former newspaper publisher, has designed Clickshare as an open system supporting Internet standards. Consumers can use Clickshare with any Web browser software. It makes purchasing data on the Web simple; the consumer gets only one bill no matter where in the world she has purchased information. And a single password works everywhere. Credit card information is not transmitted over the Internet; rather, that data is kept solely by the local publisher. Consumers are kept track of by an alphanumeric ID number that is discernable only by the local publisher.

...Clickshare as a concept has a lot going for it. It would allow newspaper publishers worldwide to put price tags on their premium data online -- say, access to their electronic archive -- and easily permit anyone on the Internet to buy it without having to submit a credit card number.

8. Another article published October 9, 1995 by Keith Dawson in Tasty Bits from the Technology Front (TBTf), states:

Clickshare

Here is an appealing proposal, called Clickshare, from Newshare Corp. of Williamstown, MA (which bills itself as "The Internet's first news broker- age" -- though it seems to me that Clickshare's potential applications extend well beyond news gathering and distribution). I first read about it in *Online Business Today*. Clickshare addresses a number of the outstanding obstacles to online commerce:

- The lack of an economical way to track and bill for small-value transactions across many Net services
- The desire for anonymity in Net value transactions -- i.e., a virt[ua]l equivalent to cash
- Users' disinclination to send credit-card data over the Net
- Users' concerns about divulging personal information to a myriad of suppliers, in order to gain access to the content they offer
- The unwieldy and growing set of authentication/password information that each online user must track as s/he signs up for disparate Net services
- The requirement of advertisers to know, on at least a statistical / demographic basis, who is receiving their messages
- Parents' desire to keep offensive Web content from their children
(<http://www.atria.com/~dawson/tbt/archive/0031.html>)

...The Clickshare system tracks your Web-surfing activities, but anonymously, and accumulates similar data for all users throughout the system. This allows advertisers and publishers to access demographic reports of what users are requesting without compromising users' privacy.

9. An article by Rose Aguilar published March 18, 1996 in C|Net News states as follows:

Clickshare collects for online pubs

Technology trials have started for a new Internet payment system from Clickshare that will make it easier to pay for online subscriptions.

Called the Clickshare Access and Payment Service, the technology lets users bill charges from several online content publishers to a single billing account. ...

For users, the attraction is that they won't have to use their credit cards for small transactions, nor will they have to give their credit card numbers to multiple vendors to sign up for multiple online publications...

The catch is that the publisher must also have signed up for the Clickshare service. But the company hopes that publishers will be attracted to the service because it will make it easier to track customer billing, count the number of times a user views a given site, and monitor visits to advertiser-supported pages.

Two publishers are participating in the tests: Studio Briefing, a daily entertainment industry newsletter, and American Reporter, an online news daily.

The registration at Clickshare provides users with a single ID and password account and a list of publishers using the service. The system also supports authentication for intranets, officials said.

10. These articles therefore indicate that a single user account is maintained, with an anonymous alphanumeric ID number used to identify users to foreign sites, with a central server for coordination and centralized accounting. They further support applicants' conception of a system having a mechanism for sharing client information and charges among a plurality of service providers; a mechanism for allowing a client

registered with one service provider to access services of another service provider; a settling means; a sharing means; and an authentication/verification means.

11. It is therefore respectfully submitted that all pertinent claim elements were clearly shown to have been possessed by applicants prior to Teper's filing date.

Further Declarants Sayeth Not.

We hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



David M. Oliver

August 9, 2004

Date



William P. Densmore, Jr.

Aug 9, 2004

Date

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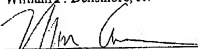
We hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

David M. Oliver

Date

William P. Densmore, Jr.

Date



Michael J. Callahan

8/12/04

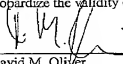
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David M. Oliver

August 4, 2004

Date



William P. Densmore, Jr.

Aug 9, 2004

Date

Michael J. Callahan

Date

NEWSHARE CORP.

Last printed 10/18/2004 3:49 AM

Hand to 914-49-3416

On Monday, Oct. 18, 2004 I received archived files on an archival storage PC at my 75 Water Street office. In the following directory

C:\ARCHIVES\MAC ARCHIVES\MACISA\ARCHIVES\CONFIDENTIAL\COMMITMENT TO NEWSHARE CITY'S M.I.

In that folder are three files:

CLICKSHARE	2,640 KB	ARE File	4/12/1994 3:29 PM
SERVERS.IDE	1,880 KB	IDE File	4/12/1996 1:30 PM
README	2 KB	File	6/5/1997 10:08 PM

I have just emailed the three files above to patent attorney Steve Hoffberg. The contents of the README file appear below (with emphasis added).

--- BEGIN TEXT OF README ---

This Omega Zip Disk was originally recorded April 12, 1994 at Crocker Communications in Northampton on a Zip Drive attached to a Macintosh Powerbook. The two .tar files were all that were put on it at that time. The disk was then sealed in an envelope and the seal was signed by Dave Oliver and Bill Densmore.

On May 9, 1996, the envelope was given to Mark Gold of Grinnell Dubendorf & Smith when executed documents relating to a sale of the TVE technology from Newshare Corp. to Clickshare Corp. were executed.

On March 25, 1997, Bill Densmore picked up the sealed envelope from Grinnell & Dubendorf and Smith when the executed sale agreement expired.

On that day, Densmore copied the .tar files to his Macintosh Proforma 536CD in the office at 75 Water Street, and copied them to the Newshare.com server in a directory called: mail/TVE 04-12-94. Subsequently, Densmore "untarred" the two files into their constituent directories and original files.

On May 13, 1997, Densmore copied the untarred directories to the Macintosh Proforma 536CD in the Water Street office, then copied the Mac folders to this zip disk.

At no time did Densmore erase, add to or delete any files.

The purpose of this exercise was to put the individual programs in a form which could be readily audited for documentation required in the Newshare patent application.

bd 05-13-97

--- END TEXT OF README ---

Executed this 18 th day of October, 2004

WFD
William P. Densmore Jr.

C:\ARCHIVES\PATENT\10-18-04 patent document info (10-18-2004).doc

Red Rock Eater Digest**Most Recent Article: Mon, 18 Aug 2003**

THE
SOUTH BEACH
DIET ONLINE

online privacy

[I am not entirely sure from reading this whether it genuinely protects privacy. (What exactly can your "home publisher" do with your information?) But this is the general type of system I think we probably need on the net and elsewhere.]

Date: Tue, 24 Oct 1995 12:40:03 -0700

From: "Newshare Corp." <newshare@rmcl.crocker.com>

Subject: Clickshare(sm) alpha up; "test drives" available

**CLICKSHARE UNIVERSAL-ID, PROFILING AND MICRO-TRANSACTION
SYSTEM ENTERS ALPHA; PERSONALIZED "TEST DRIVES" BEGIN**

WILLIAMSTOWN, Mass., Oct. 23 -- Newshare Corp. begins shipping to selected publishers this week the alpha version of its breakthrough Clickshare(SM) system to track and settle Internet-wide micro-transactions.

"Clickshare removes one of the biggest barriers to the evolution of the Internet by giving users universal-ID access to a free market for digital information," said Bill Densmore, Newshare president and cofounder. "Yet the information -- and the user relationship -- remain physically controlled by the publisher."

Clickshare's personal Newshare(sm) topic-profiling and custom-linking facilities are open for public use at <http://www.clickshare.com/tryit.html>. Transaction-handling capabilities, and an initial base of Publishing Members, will be launched in early 1996.

"At that point, publishers will be able to sell each others' information for as little as a dime per click, exchanging royalties and commissions seamlessly," added Densmore. "Internet Service Providers will be able to act as on ramps into this content universe as well."

Clickshare requires no special software for consumers beyond their Web browser and costs a publisher as little as \$795 to join. Publishers can sell information by subscription or per-query to their own users, and set all pricing. Newshare is now soliciting a broader group of "beta" publishers.

"Publishers thinking toward the next century want to maintain a close relationship with their users," says David M. Oliver, Newshare's managing director-technology and principal Clickshare author. "And this implies registering them, profiling their interests and preferences, authenticating and verifying their use of resources, and billing them for charged items. Clickshare does this for publishers and for users in background, not in-your-face."

WHAT IS CLICKSHARE(sm)?

Clickshare is a complete, distributed, user-management system which provides the only true third-party validation of web usage. It differentiates "eyeballs" rather than just

counting them. It protects personal privacy and the publisher/subscriber relationship.

Clickshare(SM) permits consumers to access information on multiple, unrelated Internet Web servers with a single ID and password. It gives publishers revenues not only from their own information but from the information their users buy elsewhere. And it gives advertisers the best way to measure web traffic by specific user.

"Clickshare's versatile architecture is core technology for a worldwide free market for digital communications -- a true information exchange," said Densmore.

Newshare Corp., is based in Berkshire County, Massachusetts, a region which has spawned several multimedia startups because of its high quality-of-life, accessibility to New York and Boston and good talent pool. Formed in September, 1994, it is privately held.

HOW IT WORKS

Clickshare has two principal components, Oliver says. Clickshare-enhanced Web server software runs on publishers' computers as a primary piece of controlling software or as an adjunct to other UNIX-based server software. It logs user registration, authentication, personalization and micro-transactions.

The second piece of essential software, the Clickshare token-validation service (TVS) server, is run by Newshare Corp. or licensees. It creates and validates authentication tokens, brokers non-personal user preferences among publishers, and maintains "page visit" records from multiple independent sites sortable by anonymous user number, page visited and site ID.

"At no time does Clickshare know a user's name or demographic profile," says Oliver. "Only the user's home-base publisher has this information."

Clickshare has been called a an example of "wise thinking" (Steve Outing, Editor & Publisher Interactive, Sept. 18, 1995) and "the excelsior that will allow web businesses to sell information by the page" (WEBster, Oct. 3, 1995).

Each user has a single "home base" at a Publishing Member (likely to be a local or speciality publication with whom they have a continuing relation). Clickshare users register just once with their home base, providing credit-card information by phone, fax, mail or secure Internet connection. At no time do credit-card numbers or other personal information traverse the Clickshare system.

Thereafter, a user begins a Clickshare(sm) session as simply as logging in to the online world in the first place. The user must enter a personal ID and password just once during each session. In response, their home Publishing Member provides them a personalized, updated, jumpoff page of useful links, based on the personal topical-interest profile the user provided at initial registration.

As they browse effortlessly to Clickshare-enabled and other sites, users can be confident that the link between their identity and their tracks does not go beyond their home Publisher. Clickshare provides mechanisms to establish charge limits and receive periodic reports of charges.

The Clickshare-enhanced Web Server -- which is browser independent -- is provided to Member Publishers by Newshare

Corp. free under license. Newshare's back-end service network exchanges data with the Internet servers of Clickshare-enabled sites, validating users and tracking all discrete page accesses -- chargeable or free -- across every participating site.

Clickshare tracks content served to users regardless of the location of their "home" Publishing Member. Aggregate micro-charges, settled monthly or more frequently, allocating commissions, royalties and transaction fees, thus form the basis of a system resembling an ATM network.

Clickshare leaves to each Publishing Member the marketing contours of its relationship to its customers. Each Publishing Member is thus free to use its own model for user subscription or per-page rates.

A portion of all fees accumulated by a user for all visited Clickshare-enabled sites is retained by the user's home Publishing Member. This is termed a "referral commission." And Newshare retains a portion for its role in tracking and clearing transactions. At least 50 percent of each transaction goes to the content owner as a royalty.

MORE THAN IP NUMBERS

Beyond the model of payment for access to information, because it tracks known users (rather than Internet Protocol (IP) numbers), Clickshare may also serve as a third-party circulation/viewership auditing mechanism for the advertising and publishing industry, while leaving to users control of release of demographic and other data, and respecting their desires for privacy.

"This transparent and efficient mechanism makes it economically practical to bill information purchases of as little as a dime and possibly less," says Oliver. "Thus Clickshare provides the platform on which the consumer of the 21st century can freely and conveniently access independently owned information worldwide, paying through existing credit structures."

For more news and information, send email to info@newshare.com or see: <http://www.newshare.com/clickshare/>

"Clickshare" and "Newshare" are registered servicemarks of Newshare Corp.

For media information contact: Felix Kramer, Kramer Communications, (212) 866-4864 (felix@newshare.com); all other queries to: Bill Densmore or Lynn Duncan at Newshare Corp., (413) 458-8001 (mail@newshare.com).

The Internet is not about Sales Brochures

Clickshare Clickshare frequently asked questions

NOTE: Portions of this FAQ (written in late 1995 and since then only minimally updated, are significantly out of date. But we hope the information will still be useful.

Q: You call Clickshare a "service," not a network. Why?

A: Clickshare is not a network (implying a physical infrastructure), but rather a network protocol (software) which operates across a physical network employing TCP/IP and HTTP. The Internet is such a network.

Clickshare's protocol provides a suite of services to publishers who adopt it. These include universal, one-ID registration, session-based user validation, user profiling (to support personalization and demographic-data collection) and user-access verification (the latter supporting per-query, per page or per "click" billing).

The Clickshare facility permits owners of proprietary content to offer it via the Internet. Clickshare customers can obtain and pay for it readily; non-Clickshare users will be unable to view the content unless they first enroll and arrange a form of payment.

But as important, Clickshare users are free to use the vast free resources of the Internet seamlessly and even jump back and forth between free and paid resources without difficulty. And Clickshare Publishing Members may provide a mix of chargeable and free content on their web sites -- some of it open to the general Internet user and some open only to Newshare users.

In this sense, Clickshare is not a technology network but a loose affiliation of content providers for billing purposes only. It has been described as a system enabling "billable hypertext links."

Q: Is there anything else out there like Clickshare?

A: Not that we know of. Unlike a relationship with a proprietary network or online service, the Clickshare Publishing Member maintains and controls the primary relationship with the end-user as well as the look and feel of content provided. Clickshare's role is as a back-end authentication and payment facilitator and -- at the Publishing Member's option -- as a context-provider for Newshare-enabled content of other unrelated Publishing Members. This later service will be provided by the Newshare Syndicate.

Q: How much does it cost for a content provider to become a part of the Clickshare service?

A: Regardless of size, there is a one-time membership fee of \$1,995 for Clickshare publishing membership. With membership comes a free license to use Clickshare-enhanced server software for user registration. This fee may be paid upon enrollment or it may be debited from the Publishing Member's clearing account as a percentage of ongoing royalty payments. The Publisher Member is also charged a fee of \$3 per year, payable quarterly, for each of the first 10,000 end-users who register to use Clickshare through their site (with a declining per-user fee schedule above that level). That fee may also be financed via "clickstream" royalties or commissions otherwise due Publishing Member. This per-user fee is required to finance the scaling-up of technical facilities, which depends on the total number of users in the Clickshare "universe." A Publisher with 100,000 users puts more "load" on the system than one with 100 users.

Q: How does Clickshare Corp. make money on an ongoing basis?

A: The contract between Clickshare and each Publishing Member permits Clickshare to deduct a transaction fee from the value of each unit of "clicked" information handled by the Clickshare service. This fee, like a commission, will equal 20% of the transaction amount.

Q: Exactly how is a consumer user charged for his reading, viewing or listening?

A: Clickshare is WWW-based. A user clicks to the home page of his or her Publishing Member, which might be a newspaper, a trade publisher or an Internet service provider. The user's Home Publisher may "serve" up a generic home page to all its users, or it may construct, on the fly, custom home pages for each individual member.

Publishing Members operate an Internet server equipped with the Clickshare-enhanced, UNIX-based httpd server. The user requesting a page from anywhere in the Internet universe gets it back without intervention. If it is content of another Clickshare Publishing Member, a record of the request is made in background. If the page is priced above specified levels, the user may be prompted before receiving it.

For users who are paying on a flat (subscription) basis, at the end of the month, the user's access is totaled and if the value of "clicks" exceeds the basic monthly fee to the Home Publisher, the user is billed. If it is less, the user pays only a basic fee set by the Publishing Member. The only billing and payment relationship at the consumer level is between the Publishing Member and the user.

The Publishing Member draws from or pays into a clearing account at the Clickshare corporate/technical level equal to the sum of the Publishing Member's user-member clicks -- offset against any original content that the Publishing Member has "served" to the global Clickshare system. This could be a net positive or negative number for the Publishing Member, depending how active a supplier of content the Publishing Member is. If it is positive, the Publishing Member doesn't have to charge its users a very high monthly fee to make money. If it is negative, the Publishing Member may need to raise the subscription fees.

Q: You have said that the Clickshare-enhanced server software is free under license. What is the \$1,995 charge for?

A: The \$1,995 is the current one-time fee for a content provider to access the Clickshare micro-transaction settlement service as a new Publishing Member. The fee opens access to the Clickshare system for all of the publisher's home-base users who have registered as Clickshare users. They do this with their home-base publisher.

The \$1,995 one-time license fee does not have to be paid in a lump sum. It may be paid through a withholding of a percentage of royalty payments to the Publishing Member for "clicks" to its charged content. In this way, the Publishing Member pays nothing for the service until it begins to produce revenue.

The \$1,995 fee is uniform for all sizes of Publishing Member. Those with broader, more popular content will benefit more than those with narrow, limited-interest content. Because Clickshare's form of compensation is a transaction fee which is a percentage of "click fees," Clickshare ultimately makes money when content providers sell content. That creates an incentive for Clickshare Corp. to help its members to sell content. It is a classic broker relationship.

Q: Are there any other fees?

A: Yes. Publishing Members are assessed an annual fee of \$3 per user enabled. This fee is payable at the end of each quarter and is based upon the number of enabled users at the end of the period. This fee equitably spreads the technology costs of processing transactions between large publishers and small publishers.

Q: How do publishers provide content via Clickshare Corp.?

It is a misconception to think of the Publishing Member as providing content to Clickshare. We expect our Publishing Members to maintain their own content on their own Internet server (or one they purchase space on). Clickshare Corp. does two things:

- Through the Clickshare server software, we enable the content provider to track and receive royalties from users who click on content pages; and,
- At the Publishing Member's option, we will provide links to the Publishing Member's content via the Newshare Syndicate service, run by Newshare Corp, parent corporation to Clickshare.

The Publishing Member retains original copyright to its own original material. The Publishing Member also grants a limited license to Newshare to create links to that content and a license to other Clickshare Publishing Members to reference and broker the sale of that content to their members at a price set by the originating Publishing Member. Clickshare makes money only when the Publishing Member sells content. In this fashion, Clickshare preserves the independence of publishers, shoulders a share of the financial risks, yet establishes a framework for sharing of information and users among publishers.

Q: What amount will the per-access User fees be, and how much will the originating publisher get?

The Clickshare service will at the outset permit 16 different pricing levels, but provides the technical capacity for thousands of pricing levels. We expect that these will range from as little as a few pennies per page for low-value-added, "commodity" to several dollars per page for exclusive, time-sensitive material. Our strategy is to keep page costs very low and broker information for which this is an appropriate price. Clickshare is capable of completing transactions for the purchase of software applets (Java programs for instance) and off-line products, as well.

Q: Do users get to approve each information purchase?

A: The Clickshare concept is for users to access content without having to decide before each "click" whether they can afford it. The Publishing Member sets the price of a page being served. The Publishing Member has complete flexibility in its agreement with users to set a price above which there will be an "approval screen" displayed before information is purchased. We anticipate that most users will commonly agree to be served information without per-item approval if the price is in the range of one dollar or less. There is little market research on this topic as it has never been feasible to sell information "by the click" at such a low fee.

Q: Do Publishing Members have the right to download and publish Clickshare-enabled materials?

A: Absolutely no. Not if you mean "publish" in the conventional sense of the printed page. Clickshare's service is not intended to handle royalty settlement for conventional print publishing. It is intended to automate the systematic use of copyrighted material on a one-time, non-commercial basis by individuals. For example, if a newspaper wishes to print a piece of Clickshare-enabled content, it must obtain copyright in a conventional fashion from the original owner. We might facilitate this process manually as a service

and we intend to be compatible with variety of "ecash" payment systems which could be used to pay for print publication rights.

Q: Then what does Clickshare charge for?

A: The Clickshare service will charge the clearing account of a Publishing Member whose consumer user "clicks to" World Wide Web-accessible content. The charge is determined by the copyright-owner of the content used and is for one-time, personal use.

Q: How is the user "billed" for the reading or other use of Clickshare-enabled materials?

Records of these accesses and charges will be provided by the Clickshare service to the Publishing Member's server machine on a periodic basis, possibly as often as daily. The Publishing Member may take this data and feed it to whatever billing engine it wishes to use to bill its own members. However, we expect to recommend approved vendors for this service and we may ourselves offer a billing facility.

In keeping with our strategic goal of maintaining minimal proprietary roadblocks to the Clickshare service and inviting value-added services from other vendors, we are not specifying a billing facility. We will provide the date required to perform billing and will perform billing as an optional service upon request.

Q: What is the difference between Clickshare and Newshare?

Newshare is an editorial system for exchanging local- and topic-specific news among licensed Publishing Members and their affiliated users. Clickshare is a technology which makes concepts such as Newshare economically feasible on a broad scale. Clickshare can be used for exchange of any information (not just news) which can be formatted for acquisition "by the click" via the World Wide Web.

Newshare Corp. intends to award geographic-specific or topic-specific exclusivity to Publishing Members in exchange for their use of the Newshare name in their service. Such publishers must follow Newshare's Customer Service Objectives (CSO) and the exclusivity agreement is renewed after a specified period.

Use of the Clickshare service, which, much like any other form of common carriage, is open to any content producer willing to purchase a license to use it.

Q: Will Publishing Members who join the Clickshare service have to also rename their digital publications to include the Clickshare brand in the title?

A: No, unless they wish to be designated as a Newshare lead topic- or geographic-specific partner. We believe that information consumers rely upon a recognizable brand to assure them of ease-of-use, quality and accuracy. The phrase "newshare" conveys more precisely than any existing word the concept our service enables. Since the objective is to attract the most number of users to Clickshare-enabled content as opposed to some other service's content, a long history of consumer marketing in the free world suggests they way to do this is with a recognizable brand. That is Newshare, a registered servicemark of Newshare Corp. However, many publishers may prefer to maintain their own brand's identity and will therefore use only the Clickshare technology.

Q: Will Publishing Members be under any obligation to link their consumer users to the content of the Newshare Syndicate or other Publishing Members?

A: Not at all. However, a publisher who wishes to obtain additional revenue at no incremental cost would

be well advised to "send" its users to Newshare and fellow Publishing Members for content it does not provide locally or topically. Then when its users "click" on fellow member content, they (the originating Publishing Member) receive a referral fee for enabling that "click."

Q: So the only content benefit to publishers is having access to material to use, which may or may not meet their needs or standards?

A: The aim of Newshare is not primarily to provide content for traditional publishing; it is to provide a reliable, one-stop resource (and more particularly a one bill resource) for consumers to find and obtain topic- and geographic-specific, time-sensitive information via the Internet. Clickshare and its Publishing Members enable this process, and are financially rewarded as a result, through royalties on their own works and commissions for the sale to their users of other publishers' works.

Q: Will you guarantee the accuracy of reports?

A: We cannot guarantee the accuracy of the copyrighted content of Clickshare Publishing Members any more than a newspaper can guarantee the accuracy of the work of all of its news staff. Newshare Publishing Members will be contractually obligated to meet a set of Customer Service Objectives, which will include measurements of accuracy of their content. Publishing Members who do not meet these objective standards will not receive extended contracts in Newshare membership, although they will continue to be permitted to use the Clickshare technical service.

Q: Who is among Clickshare's Publishing Members?

A: See the Clickshare press releases (index) for the latest information on this.

Q: I have heard that the major online services -- America Online and Prodigy in particular -- have adopted the practice of storing Web pages of Internet publishers within their own "firewalls" and then serving their millions of users by accessing those "copies" of the real pages. What is the copyright status of this practice?

A: Prodigy and America Online "cache" popular Internet website pages on their own servers to provide better speed and reliability to its members. Some legal experts argue that making a digital copy of a document from the Internet, then providing it to hundreds of other users without notifying the originator violates copyright law. But this theory has not been tested in court yet.

Q: Will widespread "caching" of web pages interfere with the operation of the Clickshare service?

A: Yes and no. Absent secondary technology or service arrangements with the major services, it would make it impossible to track every click to copyrighted content. But the contract governing admission to the Clickshare service should take care of this problem administratively.

Here's how: For Prodigy or AOL to access a chargeable Clickshare-enabled page in the first place, they will have to be at minimum a technical member of Clickshare. We are in discussion on these subjects with the online services. And the contractual agreement we expect they will sign with Clickshare Corp. will be worded to make grabbing pages for caching a violation of the one-time, personal-use-only agreement -- unless the service also proxies the compensation structure as well.

The online service will employ a Clickshare-like structure to track access by its own users to pages cached from the Clickshare service and will provide to Clickshare individual records of each access for billing. In

fact, the online services already have sophisticated systems for tracking the activities of individual users within their closed "universes."

Q: How many "clicks" equals one piece of content. Are all pieces of content valued equally for this purpose?

A: "Click" is shorthand for a Universal Resource Locator (URL) request in HTTP format. Most Clickshare users access information by the "click" of a mouse. One click of the mouse is one page of HTTP material. This turns out to be a highly flexible way of charging for information, both from the user and publisher perspective. Using Clickshare, the publisher can supply text, graphics, sound or software in response to a user's URL request. And the publisher can apply free-market principles in determining how much information to supply in response to a click and what it should cost.

The Clickshare user makes informed judgements about which information to "click" on based upon its value in terms of price, length or format. When the price is right, the user makes a purchase.

Early application of the Clickshare service will establish a "market" for the value of typical information sought. We expect that most publishers will offer to supply many resources for prices in the range of 10- to 25-cents and that users will "click" on such content without specific approval required for each purchase. On the otherhand, the Clickshare service will mandate user approval for purchases at higher rates. But the thresholds will be determined by the users and publishers when service is established and can be more or less infinitely customized.

Our expectation is that this will create a self-regulating mechanism for content providers to regulate pricing by the size of the page served; and for users to make content-purchase decisions on the same basis. If they find a content provider serves up minimal pages for 25 cents a pop, they won't click back again.

Q: What about charging different prices to different users and for different types of information?

A: No problem. Embedded in the Clickshare service is the ability to delineate "page classes" which have different retail values. This permits a Publishing Member, for example, to have "tiers" of service. One tier might be free content open to the public. The next "tier" might be content open at no charge solely to Clickshare enabled users. Another "tier" might be open to the Publisher Member's own local users for a monthly flat subscription fee -- and charged "by the click" to remote Clickshare users. And a final tier might be charged to all users, but at a different price depending whether the user is local or remote. Since the Clickshare server can identify the "class" of an incoming user, it can price-differentiate its service to that user.

Q: A number of companies are proposing to establish "e-cash" systems which charge Internet purchases to credit cards. What sets Clickshare apart -- and how can Clickshare be more economical than a credit-card transaction?

A: Clickshare is intended to work underneath and in collaboration with ecash and credit-card implementations. It is a compatible technology which is not hooked to any specific e-cash implementation; it can work with all of them.

As a consumer, you may not realize that each time you use your credit card, the business selling you a good or service is usually paying at least 25 cents plus 2% of your purchase for the privilege of getting paid by the credit-card issuer. While that is a trivial piece of major transactions, it renders small exchanges prohibitively expensive. One reason for the 25-cent base fee is that credit-card authorizations must usually

travel across conventional telephone circuits, resulting in unavoidably high cost.

Clickshare, on the other hand, operates across the Internet, where the cost of carriage of information is not presently charged "a la carte." as with the phone system. The Internet's TCP/IP protocol is very efficient at moving tiny parcels of digital information compared with traditional telephone lines. Taking advantage of this, Clickshare is designed to bundle dozens or even hundreds of individual information purchases during a monthly span and then obtain the online consumer's approval to charge them in bulk via a credit-card network once per month. Only then does the credit-card transaction have to go out on the traditional phone network. This results in a single credit-card transaction fee of 25 cents spread among many individual transactions and hence a highly efficient method of charging for information access.

Clickshare will charge a 20% transaction fee to the buyers of information. This fee will actually be charged to an intermediary -- the Clickshare user's home Publishing Member -- who will apply it to the user's account.

With credit-card processors typically charging 25 cents per transaction and 1.5- 2% of the total charge, you can see that Clickshare at the outset will always be cheaper than a direct credit-card charge for purchases of around \$2.00 or less. We anticipate the Clickshare service will be able to aggregate and clear transactions to the credit-card networks efficiently enough to be able to lower the 20% charge for higher-amount transactions.

Q: You seem to be positioning Clickshare as the "pay per click" service. But don't consumers have an aversion to paying for things on a nickel-and-dime basis?

A: While Clickshare does enable payment "by the click," we anticipate that most publishers will still elect to provide their home-base users with a suite of information on a monthly subscription or "bulk" basis. However, any universal system of digital information exchange will have to value information "by the click" and provide for background settlement among publishers "by the click" if it is to function in a practical sense.

In most other media -- the telephone and cable networks come immediately to mind -- there are a variety of charging mechanisms and marketing strategies. But information is not like a sack of flour, a commodity where each grain is identical to the next. So it is not logical to think that it will be sold that way so long as there is another way to sell it.

In addition, whether consumers will resist paying for information when its value is measured in pennies rather than dimes or quarters is not yet documented, since prior to Clickshare and the Internet there was no economical way to sell information in that price range on a point-to-point, rather than broadcast, basis.

Finally, it is very well documented that specialized consumers will happily "pay per query" for some types of information. Examples include some types of business and professional information, exclusive and analytical reports and information in some way personalized to the consumer's interests.

Q: How would a publisher use Clickshare and not charge its subscribers "by the click"?

A: Clickshare works in background to "transport" information about the value of a page access between the publisher (who gets a royalty), the referring Home Publisher of the user (who gets a referral commission, sort of like being paid for creating a link). Whether the user's Home Publisher bills that user per-click is another story. What has to happen for the system to function is that the content-originator gets a royalty-by-the-click and the referring publisher gets a commission-by-the-click.

A newspaper Publisher might decide that its Clickshare-enabled users can get all-the-can-eat surfing of Clickshare resources costing less than 50 cents per click for a flat fee of \$15 a month on top of their basic \$4.95 charge. Then the publisher would do a calculus to make sure that on average the extra \$15 would cover the typical surfing charges. Maybe they would figure they would be paying out royalties and our transaction fees adding up to an average of \$13 a month, so they pocket \$2 per user.

In this scenario, the user has purchased "bulk access" to Clickshare resources, so should be free of that sense of paying "by the click."

This is the way we use telephone service, in some respects. Some telcos offer "metered" local service, but give you a preset amount of "message units" per month which you "use or lose." Clickshare could operate the same way. Our point is that these are marketing considerations for a local- or topic-specific Publishing Member, not for Clickshare Corp. Our entire strategy is based upon empowering the publisher to control the user relationship.

Q: It is unclear to me after reading your web site's materials whether one must log in (enter password) for each web site visited.

A: No. And that is one of the key consumer-friendly features of Clickshare. The service allows you to maintain one registration that provides access to any publisher in the "Clickshare universe" of publishers. You log in once, at your Home Publisher (the place you choose to have your credit relationship), who authenticates you. This begins a "session". From that point, for some determined time, you can get information from any other Clickshare-enabled site (and you're never prevented from getting information from a non-enabled site) without having to re-authenticate at every "front door".

Q: When a publisher's own user requests a page of information from that Publishing Member's local Clickshare-enabled server, are either the user or the publisher charged by Clickshare?

A: This is not a quick answer.

First, there are three types of content available on a Clickshare-enabled server:

- Content not being tracked by the Clickshare service. We don't care how or if you are selling this.
- Content being tracked by the Clickshare service but for which no "per-query" amount is being charged. We call this Page Class Level 0 for no charge. If we are tracking it, we will charge 1 cent per access (Because we have to have funds to support and make money on our back end which is handling all the validation and clearance). It doesn't matter whether the Clickshare-enabled user is remote or local.
- Content being track by the Clickshare service for which a "per-query" amount IS being charged. We get 20%, period.

If you don't want to pay 20% to sell your own content to your own users, you can do one of two things:

- Sell it "all you can eat" (by subscription) so that all you are charged by us is one cent per access.
- Run it outside the Clickshare system for your local users and run it inside the Clickshare system for remote users. In this way, you will get no information (at least from Clickshare) about what your own users are looking at, and your own users will not be able to access content at other sites, potentially giving you a 35% referral commission each time they do.

Q: In a sense, isn't the Internet today like the U.S. telephone system just after the turn of the century?

A: Yes. Think of the Internet protocol -- the language computers speak across the Internet -- as a common transfer mechanism for data much as copper wires were a common transfer mechanism for voice in 1911. Everyone knew how to string to wires and make a phone connection after Alexander Graham Bell. But then how did you link together all those wires in a seamless grid such as we have today? And especially, how did you bill for all those calls that went from local telco to local telco to local "telco"?

In that era the answer was that the small companies first affiliated with the Bell System as franchisees and eventually were bought up and combined into AT&T. AT&T then developed a billing "standard" which by the 1960s made obsolete the need to have operators take billing information for a long-distance call. Ultimately AT&T was broken up, but the billing "standards" remain among AT&T, Sprint, MCI and the Baby Bells. Thus you can direct-dial a call across many networks and have the charges show up on one bill at the end of the month.

So Internet protocol for transferring information is like the copper wires. But like the early days of the phone system, no one has adopted, or even proposed prior to Clickshare, a billing standard for the transfer of information on the Internet measured other than by time or by bulk subscription. We believe Clickshare may emerge as such a standard.

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This is the mirror of a page (<http://www.clickshare.com/pubpack/clickfaq.html>) last updated 3 September 1996

~~Clickshare~~ Clickshare Technical FAQ

We see these explanations of how Clickshare operates, recently written by David M. Oliver, Managing Director-Technology: <dave@clickshare.com>, as the starting point for a more complete FAQ. (The existing Clickshare FAQ on general topics needs an overhaul and updating!)

Terminology

- **service provider:** a Web Site operator who either vends information or entertainment content, or maintains a financial relationship with users, or both.
- **billing entity:** the Clickshare Service Provider that maintains the billing relationship with the user
- **home site:** same
- **publisher:** a Clickshare Service Provider who vends information or entertainment content
- **home publisher:** same; but additionally acts as billing entity for some users
(Note that Clickshare allows all possible combinations for vending content and managing users)
- **Clickshare Web Server:** the HTTP server process(es) running on equipment owned or operated by a billing entity or publisher
- **Clickshare Authentication Service:** a user authentication service provided to Clickshare Web Servers via a set of Clickshare Authentication Server machines operated by Clickshare Corporation.
- **Clickshare Logging Service:** a transaction logging service provided to Clickshare Web Servers via a set of Clickshare Logging Server machines operated by Clickshare Corporation.

Q: What kind of connection is used between merchants (publishers) and Clickshare (e.g. requesting/authenticating a token)?

A: The Clickshare Web Server at each Clickshare Service Provider (publisher or billing entity) maintains a persistent connection to the Clickshare Authentication Service. Billing entities request authentication tokens for their valid users; publishers ask that these be validated.

The protocol running over this connection is our own design, as lightweight as possible. The protocol is datagram-based, with reliable-delivery provisions built-in.

The "Clickshare Authentication Service" consists of a set of machines, operated by Clickshare Corp, that offer Clickshare Authentication. If a Web Server's connection to one such server is broken due to server error, bad network, etc, it is possible to reconnect to another authentication server on the fly.

Q: Is this connection always open or must it be re-established everytime?

A: The connection is initiated when the Web Server starts up. It is always open, re-established only after failure (of either end).

Q: How many of these connections per second can a typical server handle?

We need to re-phrase this, given the above, into **two questions:**

1. How many requests (acquire, validate, invalidate...) can one Clickshare Authentication Server handle per

second?

A: This depends very much on the quantity of "iron" one throws at the problem. Our early experience suggests that one small machine (Intel Pentium, say) can handle about 25 requests per second - or about 1M requests in a (12 hour) day. We have noted that this volume scales well with changes in processor performance probably to the point where throughput is limited by the network interface (ability of the network to deliver packets to the machine's network adaptor, and the ability of that adaptor to deliver packet's to the process).

Please recall that Clickshare's "token validation" bears NO resemblance to the "credit card verification" process (where, for each request, a separate call is opened and closed).

The Clickshare Authentication Service can be thought of as an "authentication proxy". The billing entity's Web Server tells Clickshare:

"This is a valid user. Register this user for a new session, and validate all the user's requests for me (within the confines of service parameters and so forth that we both agree on)".

All other Web Servers then request authentication information from Clickshare, which can perform this service at very high speed.

2. How many Web Servers can a Clickshare Authentication Server handle at once?

A: Given the numbers above, the volume of requests to be processed is more important than the number of servers handled. It might be that 5 high-volume web servers (+250,000 requests per day) might be served by a single Clickshare Authentication Server, or that 25 medium volume servers (50,000 requests/day) are serviced.

Each server of the Clickshare Service is designed to handle a scalable number of Web Server "clients". Clickshare Corp advises the operators of these Web Servers which authentication servers it can connect to. The "load" is balanced by authorizing a mixture of sites for each authentication server. (wouldn't an automatic load-balancing technique be nice?! coming soon...).

Requests are handled on a first-come, first-served basis. No priority is given to large sites (for example), even though a large site may consume 25% of an authentication server's service bandwidth.

Q: Can the token authentication be handled by some distributed processing network or must it be centralized? Are there any concerns for bottlenecks during peak times?

A: As explained above, the Clickshare Authentication Service is very distributed (offered by a set of machines, not a single machine). The Service can be scaled by adding more authentication server machines, by making each machine more powerful, and by judicious placement of the servers around the internet (to limit the number of hops between Web Server and Authentication Server). Each Web Server has a set of machines that it can contact for service.

It is certainly true that the Clickshare Service "imposes" a third party into the transaction scheme. And, of course, when thinking from a "vulnerability" viewpoint, adding anything between the two parties of a transaction creates weak points (if, say, the mid-point goes down). However, the weakness is also the strength - imposing a neutral third party on the process provides for third-party verification. We think this is crucial for widely adopted transaction services. Its an engineering problem to design the service in such

as way that it is tolerant of many kinds of failure. (That's been our goal from the start).

Q: What kind of security is used to prevent unauthorized use of tokens? (no encryption?)

A: We have always felt that the need for security must be balanced with the risk of exposure. There are two ways to minimize that risk: technical and financial.

Tokens in the Clickshare Service have limited value - limited in time, and limited in dollar value (in that everyone we're currently in discussion with wants begin by using the Service for small-value transactions (\$.10 -> \$1.00), as we had planned). The contents of the token are not readable by any of the Web Servers (who deal with the token as an opaque string in all cases). Therefore, private key encryption can be used for the token (since only the Authentication Server that issued the token has to read its contents). Second, several parameters are built into the service that can act as a "throttle" on the amount of use a token gets. This prevents a thief from rapidly acquiring volumes of chargeable material (say, using a specially designed "agent" program). Thirdly, each token is anchored to one IP address, and valid for only one session. Thus, theft of a token also requires IP spoofing by the host as well.

That's the current technical setup. In the immediate future, we see several schemes for providing a high-security service that could comfortably scale to higher dollar values per transaction. These depend on widely available browser features which are not yet available, though they are being "standardized" (by the browser vendors, through the Internet's IETF). We think it is important to remain "browser independent" even if that appears to limit our available options.

Note however, that there is a quantitative difference between low value transactions and high value ones: in the latter, the user expects to "pre-approve" each one. For low value fare, it's probable that the user will not want to be interrupted for every information request, but rather might want to be advised at the end of a session. The Clickshare Service is designed to be a minimally intrusive service, fast-acting and out of the user's view. Thus, it lends itself to the high-volume, low-value arena of purchasing information rather than "objects".

The other aspect of security is bearing the financial risk. If the user or the web server operator were to bear all the financial risk for purchasing information, then the Clickshare Service would have to be very close to "perfectly secure" (impossible actually) to be accepted. In fact, Clickshare does bear some of the financial responsibility, and needs to build into its service fee structure a buffer for dealing with fraudulent transactions.

Q: Who would handle customer complaints? (home publisher?)

A: The experience at First Virtual Holdings is that they get every kind of customer service call possible - even though they are responsible for a very tiny part of their customer's Internet use. Therefore a question like this is hard to answer authoritatively.

We feel customer service complaints are likely to be handled most often by the billing entity. That's one reason why we profit-share with the "home publishers". However, I think that users will quickly recognize repeated failures on the part of specific publishers, and directly interact with them. Further, I think large numbers of complaints against a publisher will result in action by the home-site operators themselves (in this regard it is very similar to the credit card model, I think).

Clickshare will be involved as a record-keeper, I think - verifying records of transactions.

Q: What share of total costs (averaged over all transactions) would arise from customer service?

A: That's a question I can not answer from experience - I can not point you to any deep experience here at Clickshare, or with any other service except First Virtual (who published a paper on this topic!). Of course, FV is not a micro-transaction service.

Our financial model shares a portion of the service fee with the billing entity that actually manages the customer relationship. Thus, we recognize the customer service challenge implicit in managing that relationship.

Q: What share of total costs would arise from server processing and storage both publishers and Clickshare?

A: Clickshare Corporation's largest cost is likely to be the authentication and logging servers themselves, especially if we generate the high volume of transactions we hope to generate. We will probably require premium "real estate" on the network, which adds to the cost.

The costs for publishers and service providers will vary widely depending on how the Clickshare model is adopted. If publishers themselves wish to acquire and manage bases of users (so that they can provide such users with personalized services), then publishers will have to bear the expense of serving that user base (see above). However, if banks, credit companies, and/or telcos become the organizations that service users, then publishers will have near-zero user service costs (that is, belonging to the Clickshare universe will have minimal operational cost impact). In this latter model, billing entities will bear the cost of maintaining the customer relationship (but, on the other hand, get to have the financial and service advantage of that relationship as well).

Early on, we viewed the world as "publisher-centric" (owning both content and users). Now, we see a recognition that customer service is a challenge most publishers are not used to. Over time, we think that the traditional billing companies will provide some advantages, while the publishers themselves provide others. The Clickshare Service itself is not biased toward a certain outcome.

Q: What increased bandwidth for the merchant might be required to handle transactions? What share of total costs would arise from communications (bandwidth) both for the publishers and Clickshare?

A: Sadly, we are not able to provide anything but a heuristic answer to this at this time: Our service is as low bandwidth as is possible with today's IP technology. In the model where service providers and publishers are distinct, publishers will see very limited bandwidth decay due to our service alone. The service providers, who are likely to be providing a set of auxiliary Clickshare services to users (daily expense reports, balances, transaction history, etc) will see more decay certainly.

But, overall there are fewer than 1000 bytes per request - actually fewer than 500. So, if one can (dare!) assume that the average URL request results in 8192 bytes sent to the client (which itself generates a lot of connection setup/tear down bandwidth), then our service adds 6% (including both authentication and logging in this value).

Actually, we think bandwidth is not the concern. We think LATENCY is the concern. We have designed a system that is low-latency so that the consumer sees no "interference" in acquiring information. Recall that there is NO bandwidth increase at all between client (browser) and Web Server, where the connection speed is typically poorest.

Q: What fraud/ error rate to you anticipate using Clickshare?

A: Again, very difficult to determine because no one has any experience with "systematic fraud" (which, in my mind is the danger here). The large credit card companies use about 12-18 basis points to cover fraudulent charges (this compared to 300 basis points as the number of users from whom they generate zero income due to the party paying his/her bill on time!).

Technical inquiries to David M. Oliver, Managing Director-Technology: < dave@clickshare.com >

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This is the mirror of a page (<http://www.clickshare.com/pubpack/techfaq.html>) last updated 4 September 1996

To: Multiple recipients of list TPR-NE

Subject: Newshare Corp. letter on "indecent" language (fwd) From: Craig A. Johnson Date: Sat, 9 Dec 1995 01:17:06 +0000

How the Web Was Won

Subject: Newshare Corp. letter on "indecent" language (fwd)
From: Craig A. Johnson
Date: Sat, 9 Dec 1995 01:17:06 +0000

Please read with care the following letter to White's office by William Densmore, Jr., President of Newshare, a provider of a transaction settlement and audience- measurement system for publishers.

This is a powerful letter by a company in the forefront of online service issues, and contains the type of reasoned argumentation that lawmakers and their staffs need exposure to.

Gingrich, moderates, and liberal Democrats alike have all been sandbagged by the Christian Coalition and its puppets. The leadership thought they had the conference votes to pass White (which was not a "compromise" anyway, as widely reported, but contained criminal sanctions which had no place in the bill.)

White's flirtation with the devil on online censorship demonstrates the perils of taking the middle ground on such a polarized issue. One finds out that there is no ground beneath her/him.

Currently, negotiations are proceeding to make the definition of "indecentcy" more palatable, but the feeling here is that the censorship dragon will not now be easily slain.

Mr. Densmore has asked this his letter be freely distributed.

Craig A. Johnson
Transnational Data Reporting Service, Inc.
Washington, D.C.

----- caj@tdrs.com-----

=====

December 7, 1995

Mr. John Kelly
Legislative Director
U.S. REP. RICK WHITE
116 House Canon Office Building
Washington DC 20515

via fax: 202-225-3524

Dear Mr. Kelly:

Thank-you for describing to us the status of discussion over how to effectively respond to public interest over the need to protect from the potential for viewing so-called offensive material via the Internet. We appreciate your congressman's efforts to find a balance between this legitimate concern and the preservation of First-Amendment values so critical to democracy and a free exchange of ideas.

Newshare Corp. and its Clickshare Corp. affiliate have developed the first functioning system for enabling the emergence of a free-market for digital information. We do this via the transfer of micro-transaction settlement and audience-measurement data among multiple, independent publishers. A central tenant of our open-standards system structure is that publishers have the right to determine content, pricing and user relationships just as occurs in the conventional venues of market capitalism.

Based on what we have read, we are gravely concerned about the interim status of the "indecency" language in the telcom reform bill following Wednesday's vote in the House conference committee to adopt to Goodlatte second amendment on a 17-16 vote.

The application of an un-defined standard of "indecent" to the full spectrum of information presently traversing the Internet would render the Clickshare model of distributed publisher- and user-centric control legally untenable for a service provider such as Clickshare.

Mr. John Kelly
December 7, 1995
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Clickshare is not an online service. We do not "connect" people to the Internet. Neither do we intend to originate content. But much like a bank ATM network or the Visa settlement system, we make connections and transactions possible. We fear the language as adopted Wednesday and pending in the Senate would pose vexing questions about our legal liability for questionable content "enabled" across our system. It might render the burdens of such liability too costly for us or any other public-network, information-exchange technology to absorb.

As a matter of principle, we think the marketplace is the appropriate vehicle for regulating publishing content, whether in print, over the public airwaves or in one-to-one communication across the Internet. And so we do not support any efforts by Congress to legislate in this area.

If the Internet is going to survive in any form, its pioneers must at the very least be faced with clear, constitutionally-appropriate strictures and sanctions, the risks of which can be quantified and appropriately managed. "Indecent" is no such animal and its enactment into law as a vague standard will impeded and cloud for months if not years growth of the "information superhighway" while it is litigated. Meanwhile, worldwide operators outside the legal jurisdiction of the U.S. Code will operate unfettered and U.S.-venued organizations will have to consider establishing offshore operations, with the resulting disinvestment and job transfer.

To the extent it is a real problem (and we believe the amount of such material is minuscule in comparison to the whole body of Internet content) the presence of pornography or material believed "harmful to minors" can readily be addressed through a variety of "filtering" and "rating" programs which are already on the market.

At Newshare Corp., we designed our Clickshare service

concept from the start (beginning more than 14 months ago) with a provision for "parental control." While I have provided you with a copy of our statement on this, let me summarize briefly the implementation:

The Clickshare transaction settlement and audience-measurement system provides the capability for a user's information preferences (including views on parent control) to be carried universally across the Internet in real time each time that user requests information from a Clickshare-affiliated remote publisher. The legal terms of our service agreement with publishers require the vending publisher to technically and practically respect this request to "not send"

Mr. John Kelly
December 7, 1995
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in response information which the vending publisher has identified as unsuitable for minors. The software we provide to publishers performs this technical "filter" automatically, but still leaves it up to the local publisher to define what content will be subject to the filter.

Should a site vend objectionable material despite what is in effect a warning from the user: "I don't want to see it," the user has a cause of action against the vending publisher. If the user happens to be a child, the publisher could, under the present draft of the telcom reform bill, be subject to fines and penalties. We think the publishers who willfully ignore the warning from a user will find their service under seige from more powerful economic forces than the government.

Please continue to resist just one more effort to have the government legislate morality. The best censor is a loving and attentive parent, not Big Brother and the best arbiter of taste, for better or worse, is the market.

Best regards,

Bill Densmore
President

+-----
+
| Bill Densmore -- President NEWSHARE CORPORATION
| | One Bank St., P.O. Box 367
densmore@newshare.com | | Williamstown MA 01267
voice: (413) 458-8001 | | "The Internet's first news brokerage"
http://www.newshare.com |
+-----

From listmanager@Newshare.COM Mon Oct 9 13:11:07 1995

Received: from newshare.newshare.com (root@newshare.newshare.com [204.97.12.47]) by cn

Received: from rmcl.crocker.com (newshare@rmcl.crocker.com [204.97.12.50]) by newshare

Received: (from newshare@localhost) by rmcl.crocker.com (8.6.12/8.6.10) id LAA16268; M

To: Clickshare-UPDATE

Subject: CLIPPINGS: Clickshare(SM) seen as "appealing proposal" From: "Newshare Corp." Date: Mon, 9 Oct 1995 11:18:44 -0400 (EDT)

How the Web Was Won

Subject: CLIPPINGS: Clickshare(SM) seen as "appealing proposal"
From: "Newshare Corp."
Date: Mon, 9 Oct 1995 11:18:44 -0400 (EDT)

Message-ID:
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
Status: RO
X-Status:

Among recent articles about the Clickshare(sm) Publishing System are two which do a particularly good job of describing our vision and service. Both are excerpted below, with URLs to the full texts.

Also, please use this URL after Thursday, Oct. 12 to test the personalization features of our operating Clickshare(sm) alpha:

<http://www.newshare.com/tryit.html>

-- Bill Densmore
President
Newshare Corp.
densmore@newshare.com
(413) 458-8001

THIS EXCERPT from Keith Dawson's twice weekly column: "Tasty Bits from the Technology Front" is provided FYI. The full text may be found at:

<http://www.atria.com/~dawson/tbtf/archive/current-issue.html>

-- Bill Densmore
Newshare Corp.
densmore@newshare.com

TBTF FOR 10/9/95: CLICKSHARE; WHAT INTERACTIVE TV IS COMING TO

By Keith Dawson (dawson@world.std.com)
Mon, 9 Oct 1995 05:24:22 -0400

"Here is an appealing proposal, called Clickshare, from Newshare Corp. of Williamstown, MA (which bills itself as "The Internet's first news brokerage" -- though it seems to me that Clickshare's potential applications extend well beyond news gathering and distribution). I first read about it in Online Business Today. Clickshare addresses a number of the outstanding obstacles to online commerce.

"For a quick summary of Clickshare's main features, I recommend the annotated illustration at .

TBTF alerts you twice a week to bellwethers in computer and communications technology, with special attention to commerce on the Internet. See the archive at . To subscribe send the message "subscribe" to tbtf-request@world.std.com.

EXCERPTED FROM:

WebWeek, Vol. 1, Issue 6, Oct. 1995. Mecklermedia Corp. All rights reserved.

FULL TEXT AT:

<http://www.mecklerweb.com/mags/ww/news/oct-95/products/1-6newshare.html>

HEADLINE:

Newshare Enters Pay-As-You-Click Market

By Jeremy Carl

"Williamstown, MA-based Newshare has begun alpha-testing its new Clickshare pay-per-click system, which is scheduled to debut as a full-fledged service in early 1996.

"The system, which will enable content providers to charge a fee for user accesses to certain Web documents, will run off a content provider's Internet server and require no special software for consumer users. Each Clickshare user will be allocated an anonymous but unique ID number, allowing sites using Clickshare to track their users demographically. However, users can choose not to reveal their specific identification to advertisers.."

-- END WEB WEEK EXCERPT --

From listmanager@Newshare.COM Mon Oct 23 17:03:07 1995

Received: from newshare.newshare.com (root@newshare.newshare.com [204.97.12.47]) by cn

Received: from rmcl.crocker.com (newshare@rmcl.crocker.com [204.97.12.50]) by newshare

Received: (from newshare@localhost) by rmcl.crocker.com (8.6.12/8.6.10) id PAA07285; M

To: Newshare-UPDATE

Subject: NEWS: Clickshare(sm) alpha up; "test drives" available From: "Newshare Corp." Date: Mon, 23 Oct 1995 15:

How the Web Was Won

Subject: NEWS: Clickshare(sm) alpha up; "test drives" available
From: "Newshare Corp."
Date: Mon, 23 Oct 1995 15:06:03 -0400 (EDT)

Message-ID:
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
Status: RO
X-Status:

CLICKSHARE UNIVERSAL-ID, PROFILING AND MICRO-TRANSACTION
SYSTEM ENTERS ALPHA; PERSONALIZED "TEST DRIVES" BEGIN

WILLIAMSTOWN, Mass., Oct. 23 -- Newshare Corp. begins shipping to selected publishers this week the alpha version of its breakthrough Clickshare(SM) system to track and settle Internet-wide micro-transactions.

"Clickshare removes one of the biggest barriers to the evolution of the Internet by giving users universal-ID access to a free market for digital information," said Bill Densmore, Newshare president and cofounder. "Yet the information -- and the user relationship -- remain physically controlled by the publisher."

Clickshare's personal Newshare(sm) topic-profiling and custom-linking facilities are open for public use at . Transaction-handling capabilities, and an initial base of Publishing Members, will be launched in early 1996.

"At that point, publishers will be able to sell each others' information for as little as a dime per click, exchanging royalties and commissions seamlessly," added Densmore. "Internet Service Providers will be able to act as on ramps into this content universe as well."

Clickshare requires no special software for consumers beyond their Web browser and costs a publisher as little as \$795 to join. Publishers can sell information by subscription or per-query to their own users, and set all pricing. Newshare is now soliciting a broader group of "beta" publishers.

"Publishers thinking toward the next century want to maintain a close relationship with their users," says David M. Oliver, Newshare's managing director-technology and principal Clickshare author. "And this implies registering them, profiling their interests and preferences, authenticating and verifying their use of resources, and billing them for charged items. Clickshare does this for publishers and for users in background, not in-your-face."

WHAT IS CLICKSHARE(sm)?

Clickshare is a complete, distributed, user-management system which provides the only true third-party validation of web usage. It differentiates "eyeballs" rather than just

counting them. It protects personal privacy and the publisher/subscriber relationship.

Clickshare(SM) permits consumers to access information on multiple, unrelated Internet Web servers with a single ID and password. It gives publishers revenues not only from their own information but from the information their users buy elsewhere. And it gives advertisers the best way to measure web traffic by specific user.

"Clickshare's versatile architecture is core technology for a worldwide free market for digital communications -- a true information exchange," said Densmore.

Newshare Corp., is based in Berkshire County, Massachusetts, a region which has spawned several multimedia startups because of its high quality-of-life, accessibility to New York and Boston and good talent pool. Formed in September, 1994, it is privately held.

HOW IT WORKS

Clickshare has two principal components, Oliver says. Clickshare-enhanced Web server software runs on publishers' computers as a primary piece of controlling software or as an adjunct to other UNIX-based server software. It logs user registration, authentication, personalization and micro-transactions.

The second piece of essential software, the Clickshare token-validation service (TVS) server, is run by Newshare Corp. or licensees. It creates and validates authentication tokens, brokers non-personal user preferences among publishers, and maintains "page visit" records from multiple independent sites sortable by anonymous user number, page visited and site ID.

"At no time does Clickshare know a user's name or demographic profile," says Oliver. "Only the user's home-base publisher has this information."

Clickshare has been called a an example of "wise thinking" (Steve Outing, Editor & Publisher Interactive, Sept. 18, 1995) and "the excelsior that will allow web businesses to sell information by the page" (WEBster, Oct. 3, 1995).

Each user has a single "home base" at a Publishing Member (likely to be a local or specialty publication with whom they have a continuing relation). Clickshare users register just once with their home base, providing credit-card information by phone, fax, mail or secure Internet connection. At no time do credit-card numbers or other personal information traverse the Clickshare system.

Thereafter, a user begins a Clickshare(sm) session as simply as logging in to the online world in the first place. The user must enter a personal ID and password just once during each session. In response, their home Publishing Member provides them a personalized, updated, jumpoff page of useful links, based on the personal topical-interest profile the user provided at initial registration.

As they browse effortlessly to Clickshare-enabled and other sites, users can be confident that the link between their identity and their tracks does not go beyond their home Publisher. Clickshare provides mechanisms to establish charge limits and receive periodic reports of charges.

The Clickshare-enhanced Web Server -- which is browser independent -- is provided to Member Publishers by Newshare

Corp. free under license. Newshare's back-end service network exchanges data with the Internet servers of Clickshare-enabled sites, validating users and tracking all discrete page accesses -- chargeable or free -- across every participating site.

Clickshare tracks content served to users regardless of the location of their "home" Publishing Member. Aggregate micro-charges, settled monthly or more frequently, allocating commissions, royalties and transaction fees, thus form the basis of a system resembling an ATM network.

Clickshare leaves to each Publishing Member the marketing contours of its relationship to its customers. Each Publishing Member is thus free to use its own model for user subscription or per-page rates.

A portion of all fees accumulated by a user for all visited Clickshare-enabled sites is retained by the user's home Publishing Member. This is termed a "referral commission." And Newshare retains a portion for its role in tracking and clearing transactions. At least 50 percent of each transaction goes to the content owner as a royalty.

MORE THAN IP NUMBERS

Beyond the model of payment for access to information, because it tracks known users (rather than Internet Protocol (IP) numbers), Clickshare may also serve as a third-party circulation/viewership auditing mechanism for the advertising and publishing industry, while leaving to users control of release of demographic and other data, and respecting their desires for privacy.

"This transparent and efficient mechanism makes it economically practical to bill information purchases of as little as a dime and possibly less," says Oliver. "Thus Clickshare provides the platform on which the consumer of the 21st century can freely and conveniently access independently owned information worldwide, paying through existing credit structures."

For more news and information, send email to [info\(at\)newshare.com](mailto:info(at)newshare.com) or see: <http://www.newshare.com/clickshare/>

"Clickshare" and "Newshare" are registered servicemarks of Newshare Corp.

For media information contact: Felix Kramer, Kramer Communications, (212) 866-4864 (felix@newshare.com); all other queries to: Bill Densmore or Lynn Duncan at Newshare Corp., (413) 458-8001 (mail@newshare.com).

From listmanager@Newshare.COM Mon Nov 13 02:00:42 1995

Received: from newshare.newshare.com (root@newshare.newshare.com [204.97.12.47]) by cn
Received: from rmc1.crocker.com (newshare@rmc1.crocker.com [204.97.12.50]) by newshare
Received: (from newshare@localhost) by rmc1.crocker.com (8.6.12/8.6.10) id XAA10447; S

To: Newshare-UPDATE

Subject: Clickshare to support CASIE advertising guidelines From: "Newshare Corp." Date: Sun, 12 Nov 1995 23:33:12

How the Web Was Won

Subject: Clickshare to support CASIE advertising guidelines

From: "Newshare Corp."

Date: Sun, 12 Nov 1995 23:33:12 -0500 (EST)

Message-ID:

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Status: RO

X-Status:

NEWSHARE CORP. JOINS AD INDUSTRY'S INTERACTIVE ALLIANCE;
SAYS ITS CLICKSHARE SYSTEM WILL SUPPORT "CASIE" GUIDELINES

WILLIAMSTOWN, Mass., Nov. 13 -- Newshare Corp., developer of the Clickshare tracking and transaction system, said Monday it had joined the Interactive Alliance, an advertising-industry consortium developing Internet audience-measurement standards.

The company also said it will support privacy and other guidelines contained in an industry white paper developed by the Coalition for Advertising Supported Information and Entertainment (CASIE). CASIE's members control the majority of the \$150 billion U.S. advertising market.

"The addition of Clickshare adds strength to The Interactive Alliance," said Marshall L. Snyder, executive vice president, Arbitron NewMedia and an alliance founder. "Their business proposition has the potential to generate large numbers of identified web users."

Newshare Corp. is alpha-testing its Clickshare system, which enables Internet publishers to cooperate in generating and sharing content revenues. The absence of a micro-transaction information standard has prevented many publishers from using the World Wide Web so far.

Under Clickshare, each consumer chooses a most-trusted publisher to whom to identify himself/herself and Clickshare will never see the names. That publisher and user determine how the user's name and demographic information may be used.

Simplifying information access

Clickshare enables the anonymous tracking of individual users as they jump among unrelated Internet sites, and offers a facility to settle information transactions down to as little as 10 cents. Clickshare requires no special user software and simplifies user access to information by rendering multiple registration at Web sites unnecessary.

"The Interactive Alliance has already brought together so much of the industry in acknowledging common principles, it will make our job easier to bring about publisher cooperation," said Bill Densmore, Newshare's president. "And the CASIE working group principles strike a laudable balance among marketing requirements for a user census, the consumer's need for ease-of-use and democracy's need to assure personal privacy."

CASIE is a joint project of the Association of National Advertisers and the American Association of Advertising Agencies with the

support of the Advertising Research Foundation. It seeks to define a universal standard for third-party verification of audience claims by Web publishers which gathers uniform usage data about individual users, while respecting their privacy.

"Audience measurement efforts which adhere to the CASIE principles should help grow interactive media and benefit all those involved, including advertisers, media buyers and sellers," said Judy Black, senior partner and director of the BJK&E Interactive Group and also the chair of the CASIE research subcommittee.

What is the Alliance?

The Interactive Alliance is working to assemble the most comprehensive and definitive ongoing database on worldwide interactive media use. It was formed in 1995 by Next Century Media Inc., and The Arbitron Company. Other consortium members, in addition to Newshare Corp., now include Interse, McCollum Spielman Worldwide and MarketCast.

The Audit Bureau of Circulations and its technical support affiliate, WebTrack, have agreed to be participants in the work of The Alliance. Representatives of over 40 other industry organizations have agreed to participate as alliance advisors.

"Clickshare and The Interactive Alliance share a philosophy of cooperatively lifting the Interactive lake to raise all ships," noted Bill Harvey, president and CEO, Next Century Media. "It turns out that the Internet, which arose like topsy with no central direction, can become a more valuable business for content providers and advertisers by the same process of decentralized collaboration."

The advertising and publishing industries are struggling to reach a technology and consensus for the measurement and tracking of World Wide Web usage. The Newspaper Association of America has convened a Nov. 14 summit in Dallas so that major publishers and system vendors can discuss audience measurement principles. Newshare is among invited participants in the summit.

About the participants

Newshare Corp. was founded in September 1994 by a veteran publisher, a university technologist and a marketing executive as the Internet's first news brokerage, with a goal of building a free market for digital information among independent publishers and their users. Its first product is Clickshare. Williamstown, Mass.-based Newshare is privately funded.

Next Century Media is a team of advertising and media-research executives committed to maximizing the effectiveness of Interactive media worldwide for advertisers, agencies, network operators, content providers and consumers. Next Century Media clients include advertisers and agencies collectively representing over \$23 billion in annual advertising investments, plus a large number of network operators.

Arbitron NewMedia, a unit of the Arbitron Company, was established in 1994 to provide a wide range of survey research, consulting and methodological services to the cable, telecommunications, direct broadcast satellite, online and new media industries. The Arbitron Company is a media information firm providing services to broadcasters, advertisers and agencies. The Arbitron Company is a division of Ceridian Corp.

"Clickshare" and "Newshare" are U.S.-registered servicemarks of Newshare Corp.

NOTE TO EDITORS: The document: "Key Points About Clickshare, CASIE and Audience Measurement" is available by Email to [update\(at\)newshare.com](mailto:update(at)newshare.com) or via the World Wide Web at:

<http://www.newshare.com/News/audience.html>

Additional information about Clickshare may be found at:

<http://www.clickshare.com/clickshare/>

The "CASIE Guiding Principles of Interactive Media Audience," are available at:

<http://www.commercepark.com/AAAA/bc/casie/guide.html>

FOR MEDIA INQUIRIES:

NEWSHARE CORP.: Felix Kramer, Kramer Communications, (212) 866-4864 (felix@newshare.com); for other inquiries contact Lynn Duncan or Bill Densmore, Newshare Corp., (413) 458-8001 (mail@newshare.com). For general information send Email to info@newshare.com or visit <http://www.newshare.com/clickshare/>

Arbitron NewMedia: Thom Mocarsky, (212) 887-1314.

Next Century Media Inc.: Bill Harvey, (914) 255-2222 or (415) 331-0389.

--- END RELEASE ---

From bhaskarn@mcgraw-hill.com Thu Nov 9 15:02:09 1995

Received: from interlock.mgh.com (interlock.mgh.com [152.159.1.2]) by cnj.digex.net (8



The Internet's first news brokerage
Delivering your share of the news

Newshare Corp. Founders/Architects

ACTIVE:

William P. Densmore Jr.
Bernard Re Jr.

EMERITUS:

David M. Oliver
Michael J. Callahan

William P. Densmore Jr.

William P. Densmore Jr. (Bill), 49, is a co-founder and president of Newshare Corp. He has 20 years of editorial experience, including four with a major wire service and three with specialty publishers, having worked in Boston, Chicago, San Francisco and elsewhere. For nine years from 1983 he was a majority stockholder and president of Williamstown Advocate Inc., which owned and published two weekly newspapers in Berkshire County, Mass. The newspapers were sold in late 1992. He is a graduate of Phillips Exeter Academy and the University of Massachusetts Amherst. He is a director of The Atlantic Advisory Group and has spoken widely at industry conferences sponsored by The Gartner Group, McKinsie & Co., Editor & Publisher Interactive, The Associated Press and others. Densmore resides in Williamstown, Mass.
email: bill@newshare.com

Bernard Re Jr.

Bernard Re Jr., (Bernie), 49, is a co-founder of Newshare. He is new-media manager at the Lawrence [Ks.] Journal-World. He has held similar positions with Hagadone Newspapers and with Asbury Park Press Publications. Prior to that he was manager of computer graphics at Turley Publications Inc., of Palmer, Mass., a family-owned publisher of weekly and monthly periodicals and major commercial web-offset printer to New England colleges. Re has many years of marketing, design, PR and advertising-agency experience around metropolitan New York and is experienced on a variety of electronic-publishing platforms. Founder, CLIP AWAY/Standard Advertising Products Inc. Author of two books, "Direct Marketing Coupon Designs" and "Retail Advertising Designs" (both McGraw-Hill). From 1976 until 1988 he owned Re Design of Stamford, Conn. Among clients were IBM, Conrac Corp., Hipotronics Inc., Xerox Corp., and Emery Air Freight Corp. From 1991-1993, he published a regional monthly lifestyle magazine, "Around the Corner," in northwestern Connecticut. He attended New England School of Art and Massachusetts College of Art. Re resides in North Canaan, Conn. He serves on the Newshare Corp. Board of Directors.
email: bernie@newshare.com

EMERITUS:

David M. Oliver



The Internet's first news broker
Delivering your share of the news

Welcome to Newshare Corp.

We are a Massachusetts-based supplier of interactive media products to [newspapers](#), [broadcasters](#) and the public through the [Clickshare\(sm\) System](#) for billable hypertext links, the [Newshare\(SM\) Syndicate](#), the [Newshare\(SM\) Common Resource Center](#) and, next year, Newshare(SM) Adshare. The pages linked below describe our corporate mission.

*Some of the links you'll find here are intended only for those who have signed our [non-disclosure agreement](#). If you're interested in **Newshare's** future, we invite you to sign and return one.*

Newshare Corp. is establishing a nationwide electronic brokerage for the multi-media collection, editing, moderation and marketing of time-sensitive, general-interest news and advertising. Material will be organized both geographically and by interest area for direct [consumer](#) use. Content-provider memberships to **Newshare** are available. Tentative pricing information is available at the [Newshare Syndicate Member Info](#) page. User membership is presently free.

The service architecture of **Newshare** is based on, and draws its strength from, the Internet's ability to support a distributed network of providers and customers as well as open interfaces.

Newshare Corp. is seeking potential content partners or affiliates through a [Request For Proposals](#) process. We are very interested in developing relationships with non-traditional news providers (such as Internet newsgroup operators, BBS operators, small news organizations, Internet Service Providers, magazines, specialty information providers and entrepreneurial individuals and companies whether large or small, for-profit or not-for-profit) as well as with traditional media enterprises.

For more information about **Newshare**, please select from the following:

- [WHO is **Newshare**?](#)
- [WHAT is **Newshare**?](#)
- [WHERE is **Newshare**?](#)
- [WHEN is **Newshare** available?](#)
- [HOW will **Newshare** work?](#)
- [WHY is **Newshare** needed?](#)

- Is there ANYTHING like **Newshare** now?

The Corporate Office of Newshare:

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One Bank St., P.O. Box 367

Williamstown, MA 01267-0367 USA

VOICE: (413) 458-8001

FAX: (413) 458-8002

EMAIL: mail@newshare.com



The Newshare(SM) system in brief: Publishing Members are sought

Copyright, 1998, Newshare Corp.

Billable hypertext links

Newshare Corp. is establishing a nationwide electronic brokerage for the multi-media collection, editing, moderation and sale of time-sensitive, general-interest local news and advertising on a charge-per-page basis utilizing billable hypertext links.

The Newshare System will provide consumers with a one-bill source for all of their time-sensitive information needs which is based on open standards, is customizable and provides the maximum degree of control for indepent content producers.

Newshare(SM) Publishing Members and Contributing Members will provide material organized both geographically and by interest area. Each Publishing Member's users will have access to the content of other Publishing Members on a charge-per-page basis. Publishing Members will purchase a limited license to use the Newshare name, software and authentication system.

Content on publisher's machine

The Newshare system will permit content to remain on the server machines of independent content providers and yet be sold to the users of other, Newshare-affiliated content providers on a charge-per-page basis. Individual users will maintain a credit account with, and be "owned" by, their base Publishing Member, however.

Newshare Corp. seeks affiliation proposals from content producers such as magazines, newsletters, content aggregators, wire services, Internet service providers, bulletin-board services, weekly, college or alternative newspapers, small-market radio and television stations and individual reporters, editors, columnists or free-lance writers. Larger, traditional media organizations with a demonstrated commitment to open-standard, Internet-centered electronic publishing are also welcome to submit member or partnership proposals.

User customization planned

Unlike traditional wire services, "newshares"(SM) will go directly to consumers and will be customized by their consumer users both in content and in form of output (text, audio, video, printed, screen). Subscribers will access their local or regional Newshare(SM) member/provider via any Internet gateway using a variety of third-party, non-proprietary interfaces.

Newshare Corp. was established in September, 1994 and is currently negotiating first-stage financing. Its founders include a veteran print editor-publisher, a research university information-technology and networking specialist and an advertising/publishing industry manager/designer.

The Newshare System is expected to begin operation in the third quarter of 1995. If you are a potential information provider, member or affiliate, or would like to be added to our mailing list for future news

about the Newshare(sm) project status, EMAIL your proposal to Bill Densmore
densmore@newshare.com

*Newshare Corp.
75 Water Street
P.O. Box 367
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INFOBOT: info@newshare.com*

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NEWSHARE QUICK LINKS TO:

[NEWS TOP](#) / [WORLD NEWS](#) / [STATE NEWS \(U.S.\)](#) / [LOCAL NEWS](#) / [SPORTS](#) / [BUSINESS](#) /
[WEATHER](#) / [TOPICS](#) / [WHAT'S NEW](#) / [SYNDICATE](#) / [CLASSIFIEDS](#) / [LEAVE A COMMENT](#)



Delivering your share of the news

Newshare Custom Hypertext Services

Services offered range from single home page design to multi-page site work that would include site image, navigation planning, design and production, including image work relating to icon, photographic and masthead design.



Your Link.....



Your Link.....



Your Link.....

Fee Schedule:

HYPERTEXT DESIGN:

- HTML Hypertext Designing.....\$30.00 per hour

Sample Estimate:

DRAFT STAGE:

- HomePage.....\$50.00 per (max. 20K each)
- Hyperlinked pages.....\$25.00 per (max. 20K each)
- Icon Design.....\$100.00 per (from one to three) (max. 10K each)
- Icon Design.....\$75.00 per (from four to fourteen) (max. 10K each)
- Icon Design.....\$50.00 per (from fifteen to twenty-five) (max. 10K each)
- Site Image Design.....\$500.00 per (covers work to create a site that has an overall style and continuity to design, text, icons and other visual aspects. Includes master formats for: page design, icon design, navigation and response/interactive methods)
- Site Organizational Chart and Design Notes.....\$ no charge
- Hyperlinked B&W Scanned Images.....\$15.00 each (for scanning black and white originals and adding accent colors) Scanned Images max. original size max approx. 2-inches x 3-inches or smaller. File size range 17K to 43K.
- Hyperlinked Color Scanned Images.....\$50.00 each (for scanning color originals) Scanned Images max. original size max approx. 8-inches x 10-inches. File size range: tbd

Terms:

- Draft Stage charges are payable in advance and are non-refundable.
- Alterations to Draft Stage files are invoiced at \$50.00 per hour.
- Proofreading is a client responsibility.

WE will create a private URL so you can proofread your draft materials online prior to making them public

- *Design portfolio samples will be forwarded upon request.*

ON-SITE TRAINING:

- Training in HTML design, editing, linking, scan conversions, server communications, loading new daily copy and images and site maintenance.....\$30.00 per hour (plus travel expenses)

ON-SITE CONSULTING:

- Input regarding World Wide Web editorial, design, advertising, promotion arenas and site creation.....\$30.00 per hour (plus travel expenses)

Please submit a request for services to Newshare Corp. today.

Call us at (413) 458-8001 prior to sending materials so we can get acquainted.

USMail your materials:

Please include your ASCII TEXT files on diskette and Custom Hypertext Services fees, written instructions and other source materials as applicable.

All fees are in U.S. Dollars. Please make checks payable to Newshare Corp.

[Your Link....](#)[Your Link....](#)[Your Link....](#)[Your Link....](#)[Your Link....](#)[Your Link....](#)[To Home...](#)[To Marketing...](#)[To Membership...](#)



Newshare WWW site is a service of **Newshare Corp.**, a Massachusetts-based broker of digital information for newspapers, broadcasters and the public.

If you have comments or suggestions about **Newshare Resource Center**, please email them to **feedback@newshare.com**.

The **Newshare** name is a service mark of **Newshare Corp.**

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The Corporate Office of **Newshare**:

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The **Newshare Resource Center** is sponsored in part by: **Crocker Communications**, a Northampton, Mass.-based supplier of Internet connectivity and telephone-answering services.



The Internet's first news brokerage (SM)

Welcome to the Newshare Syndicate!

We are a broker of news and features on the Internet, delivering multimedia content from media companies and individual writers to users of World Wide Web. We are presently enrolling [Contributing Members](#) and [Publishing Members](#) who wish to provide content through our Newshare(SM) system of page-per-page viewing.

HOW THE SYNDICATE WORKS

The Newshare Syndicate is a launching pad for Internet-centric news and information content, including text, photos and -- later this year -- sound.

- As a individual content provider ([Contributing Member](#)), when you join the Newshare(SM) Syndicate you become a part of a growing network of Internet-enabled artists who plan to offer their work to the public without have to affiliate with have to restrict themselves to a proprietary online service, without having to be tied to a particular publication and with a high degree of control over the way their work is displayed and marketed.
- As a corporate content provider ([Publishing Member](#)), when you join the Newshare(SM) Syndicate, you position yourself to make money on your Internet activities through the implementation, later this year, of our Token Validation Service (TVS) charge-per-page royalty system. You also enable the local users of your service to "click" to members-only content worldwide, when available.

KEY SYNDICATE RESOURCES:

[Direct-connect to Syndicate articles, columns, news and resources](#)
[Join the Newshare Freelance electronic mailing list](#)

To become familiar with Newshare Corp. the Newshare Common, Newshare AdShare, *Your* Newshare, the Newshare Communications Center and the Newshare Resource Center use the links below.

If you would like to become a **Newshare Member**, and take full advantage of the **Newshare** you are in the **right place**.

Quick Guide to Newshare Member Definitions

- *Four ways to become a member.*

Newshare Memberships

Newshare Contributing Member

- *Offer your content to our Publishing Members from your own "home page studio".*

Newshare Publishing Member

- *Get your newspaper, station, newsletter, or column up on the Web.*

Newshare User Member

- *Access to a growing number of publications and a doorway to the WWW.*

Newshare Technical Member

- *Provide the Internet on ramp and we will provide the content.*

SPECIAL PUBLISHING MEMBER RATES

- *Limited time.*

SPECIAL CONTRIBUTING MEMBER RATES

- *Limited time.*

Setting Sale Price

- *Setting the sale price of your work.*

During this *Start-Up* phase, our **Newshare Publishing Members** are offering their work **FREE OF CHARGE** to User Members for personal use.

If you seek to post, repost, publish, forward or otherwise circulate **Newshare Publishing Members** material to other users or to the public, or as part of a published or otherwise circulated work you must obtain permission. All material originating from the **Newshare Resource Center** is copyrighted, even if it is available at no charge.

Newshare Centers

Newshare Corp.

- *About us, our plans and our vision*

Newshare Resource Center

- *From newspapers to music, from gardening to politics, sports to the weather...*

Newshare Communications Center

- *Talk to us and among yourselves...*

Newshare Common

- *WWW connections from our open-access arena...*

Newshare AdShare

- *Want product information? This is the place...*

Your Newshare

- *Plan on building your personal newspaper...*



To Home...



To Common...



To Corp HQ...

CLICKSHARE QUICK LINKS TO:

[CLICKSHARE HOME PAGE](#) | [TEST DRIVE CLICKSHARE](#) | [NEWSHARE/CLICKSHARE CONCEPT](#)
[VISION 1997](#) | [VISION 1979](#) | [NEWSHARE/CLICKSHARE NEWS](#) | [GENERAL NEWS TOP](#) | [NEWS](#)
[TOPICS](#) | [WHAT'S NEW](#) | [HOME PAGE](#) | [LEAVE A COMMENT](#)

Newshare WWW site is a service of **Newshare Corp.**, a Massachusetts-based broker of digital information for newspapers, broadcasters and the public.

If you have comments or suggestions about **Newshare Resource Center**, please email them to feedback@newshare.com.

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Newshare[®]

The Internet's first news brokerage

Newshare Contributing Member Rates & Data

If you are a free-lance journalist, writer, artist or photographer and you do not have your own set of subscribers, Newshare(sm) Contributing Membership is designed for you. It affords you World Wide Web exposure for your credentials and work and, later this year, the ability to receive royalties when web-users access your content.



Your Link.....



Your Link.....



Your Link.....

Here's how to become a Contributing Member:

- **One-Time Fee** \$ 25.00. Storage: \$3-\$5/month

ONE-TIME FEE Covers:

- Initial loading for the following Contributing Member provided HTML text pages , .gif images:
- Or use our easy to use [Newshare HomePage Template](#).
- HomePage and hyperlink pages consisting of HTML text and/or .gif images up to 50K.

STORAGE CHARGES (Monthly):

- You must pay \$5 per month at the end of the month, via a major credit card, for ongoing content storage and links.
- If you prefer, you may prepay three months at a time by check for \$12 per quarter (\$3 per month).
- For detailed information, send E-mail to join@newshare.com

[See Custom Hypertext Services](#)

Please provide your materials in this manner:

- Contributing Member will provide HTML pages and .gif formatted images to Newshare on 3.5 diskette for uploading to Newshare server. All pages should be loose within a "text" folder(directory) and all .gif images should be within a "images" folder (directory) within the text folder.

One-Time Fee also covers:

FREE Links from:

- Newshare Syndicate:** consisting of a hyperlink to your HomePage and 25-word informational description. From within the Newshare Syndicate your offerings can be browsed by potential licensees. Publishing Members will look through your portfolio of content and services to find a style, article, artwork, etc. that they can license from you and offer in their publications, both print and electronic.
- Free "hyperlinked" listing in *Newshare W3 Business Guide* our online index for visitor and member use. Listing consists of a hyperlink to your HomePage and a 50-word promotional listing.

OPEN ACCESS area:

- You may choose to place a link to your Contributing Member Materials in our **Newshare Common** for FREE.
- The **Newshare Common** is an open access area designed to house sample or full offerings. Anyone traveling the WWW can enter this area. No Newshare, member or user fees, click-fees, commissions, etc. are applicable within this open access area.

COMMISSION Agreement:

Until Token-Validation-Service is operational and click-fees" can be charged and credited the following commission structure will apply:

- Resale Commission on Contributing Member content: 15-percent of any Contributing Member content brokered through **Newshare Syndicate** .



Your Link....



Your Link....



Your Link....

OTHER Fees:

- Additional Monthly Server Space Fee.....\$1.00 per mo. per 500K

Update Files: .html file updates up to 20K that:

- are eMailed to us.....\$5.00 per file

- we have to ftp pickup.....\$3.00 per file
- (please provide full file, not just the section that is being updated)

New Files (text or Image): new .html or .gif files up to 20K that:

- are eMailed to us.....\$5.00 per file
- we have to ftp pickup.....\$3.00 per file
- each additional ftp from same site is \$2.00.
- (if ftp pickup eMail us the address and locator information)

NOTE: If you are sending us a NEW FILE you should also send us an UPDATED FILE of your HomePage with a hyperlink to it. There is no charge for a HomePage file that is updated with a hyperlink to new page content located on our server.

eMail Example:

- You eMail one NEW FILE up to 20K.....\$5.00
- You eMail New File and Updated HomePage.
- Total.....\$5.00

eMail Example:

- You eMail one NEW FILE that has an IMAGE up to 20K.....\$10.00
- You eMail New File, Image File and Updated HomePage.
- Total.....\$10.00

ftp Example:

- You have us ftp and pickup one NEW FILE up to 20K.....\$3.00
- You have us ftp and pickup New File and Updated HomePage.
- Total.....\$3.00

ftp Example:

- You have us ftp and pickup one NEW FILE that has an IMAGE up to 20K.....\$5.00
- You have us ftp and pickup New File, Image File and Updated HomePage.
- Total.....\$5.00

NOTE: You may also send us your updated and new files on a 3.5 diskette (PC or MAC format). Please include payment with files.

All fees are in U.S. Dollars. Please make checks payable to Newshare Corp.

This is just the beginning Newshare. Our goal is to take the first step . . . and then help others take it too . . .

Join Newshare today . . . by going to our [response form](#).

[Your Link.....](#)[Your Link.....](#)[Your Link.....](#)[Your Link.....](#)[Your Link.....](#)[Your Link.....](#)[Your Link.....](#)[Your Link.....](#)[Your Link.....](#)[To Home...](#)[To w3 Index...](#)[To Membership...](#)

NewshareWWW site is a service of **Newshare Corp.** a Massachusetts-based broker of digital information for newspapers, broadcasters and the public.

If you have comments or suggestions about **Newshare Resource Center**, please email them to **feedback@newshare.com**.

The **Newshare** name is a service mark of **Newshare Corp.**

*Copyright, 1995, **Newshare Corp.** All rights reserved.*

The Corporate Office of **Newshare**:

Newshare Corp.

One Bank St., P.O. Box 367

Williamstown, MA 01267-0367 USA

VOICE: (413) 458-8001

FAX: (413) 458-8002

EMAIL: **mail@newshare.com**

The **Newshare Resource Center** is sponsored in part by: **Crocker Communications**, a Northampton, Mass.-based supplier of Internet connectivity and telephone-answering services.



Delivering your share of the news

Newshare is designed as a resource center for consumers and publishers... and as a marketing environment for artists, writers and other original content originators...



Your Link....



Your Link....



Your Link....

Newshare has a goal of becoming the leading source for high-quality, timely, local, regional, national and international news and information.

Newshare Contributing Membership:

Newshare Contributing Members agree:

To share and/or offer for sale/resale or in exchange for a "click-fee", or to authorize through a licensing agreement their original content, news and time-sensitive information with our **Newshare Publishing Members**.

As a **Newshare Contributing Member** your privileges cover:

A "studio" space in the **Newshare Resource Center** where you can offer your original content for sale/resale, repackaging, copying or other reuse or distribution by our **Newshare Publishing Members**.

See [Contributing Member Rates & Data](#) for more information.

We can help you set up your HTML site with no fuss or muss...

Newshare Contributing Members memberships also includes:

- Free member "hyperlinked" listing in **Newshare Member Directory** - our online directory for visitor and member use

- Free member "hyperlinked" listing in **Newshare w3 Index** - our online index for visitor and member use
 - "Custom" HTML "Home Page" with "hyperlinks" to "Your Studio Pages" **that will hold the content you are offering**
 - Internet address and eMail service
 - One Free "Hyperlink" from your home page to any WWW address.
-

[Your Link....](#)[Your Link....](#)[Your Link....](#)[Your Link....](#)[Your Link....](#)[Your Link....](#)[To Home...](#)[To W3Index...](#)[To Membership...](#)

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yr: 2002



Delivering your share of the news

SPECIAL Newshare CONTRIBUTING MEMBER RATES

Here's how to become a Contributing Member:

One-Time Fee \$ 25.00

and Annual Fee of \$25.00 per year payable on sign-up anniversary date

ONE-TIME FEE Covers:

Storage for the following Contributing Member provided HTML text pages , .gif images:

Or use our easy to use Newshare HomePage Template.

HomePage and hyperlink pages consisting of HTML text and/or .gif images up to 50K.

Please provide your materials in this manner:

Contributing Member will ASCII text pages consisting of member provided (see Custom HTML Services) HTML text and .gif formatted images (uncompressed) to Newshare on 3.5 diskette for uploading to Newshare server. All pages should be loose within a "text" folder(directory) and all .gif images should be within a "images" folder(directory) within the text folder.

ONE-TIME FEE also covers:

FREE Links from:

- Free "hyperlinked" listing of 25-words or less of informational descriptive text in Newshare w3 Member Index to your Home Page.

From within the Newshare Syndicate your offerings can be browsed by potential licensees. Publishing

Members will look through your portfolio of content and services to find a style, article, artwork, etc. that they can license from you and offer in their publications, both print and electronic.

- Free "hyperlinked" listing in Newshare W3 Business Guide our online advertising message area for visitor and member use. Listing consists of a hyperlink to your Home Page and a 50-word promotional listing.

OPEN ACCESS area:

- You may choose to place a link to your Contributing Member Materials in our Newshare Common for FREE.

The Newshare Common is an open access area designed to house sample or full offerings. Anyone traveling the WWW can enter this area. No Newshare, member or user fees, click-fees, commissions, etc. are applicable within this open access area.

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OTHER Fees:

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Fee.....\$1.00 per mo. per 100K

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[Your Link....](#)



[Your Link....](#)



[Your Link....](#)

[To Home...](#)[To Common...](#)[To Membership...](#)



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75 Water St., P.O. Box 367

Williamstown, MA 01267-0367 USA

VOICE: (413) 458-8001

FAX: (413) 458-8009

EMAIL: mail@newshare.com



Building a free market for digital information

CLICKSHARE/TVS: Q&A

Q: What is Clickshare Service Corp. offering?

A: We've developed the patent-pending Token Validation Service (TVS). TVS is not a brand name; the brand identity will be created by the licensed operators of Clickshare services. The Clickshare/ TVS technology offers six features:

- **AFFILIATION MANAGEMENT** -- It allows audience owners such as publishers, ISPs, telcos, banks, portals, affinity groups to manage and profit from the tracking and sharing of their respective users and to account for the multi-domain sale of information or products.
- **MICROPAYMENTS** -- It makes it possible for publishers, and information or software owners to sell economically and easily to Internet consumers in units as little as 10 cents per item -- so called *micropayments*.
- **PERSONALIZATION** -- It allows consumers "privacy-protected demographics." They can store their custom information preferences as part of their user profile and then optionally give those preferences to web publishers who wish to personalize their offerings. TVS *Digital Calling Card (SM)* technology makes this possible.
- **ACCESS CONTROL** -- It permits a web site to differentiate requests for information by individual users rather than broad domains -- even if the user has never registered with that particular web site. This "Service Class" technology avoids users having to maintain multiple IDs and passwords and allows for universal registration.
- **AUDIENCE MEASUREMENT** -- Advertisers want to measure the effectiveness of their pitches by knowing as much about individual viewers as possible. Basic Internet protocols identify users only by "domain." TVS *Digital Calling Card* technology transfers a unique identifier for each user worldwide. This creates a platform for fine-grained demographic analysis while protecting user privacy.
- **EASE OF USE** -- The consumer can leverage a single billing relationship with a "most-trusted" Clickshare Service Provider -- such as an ISP, telco, cable company, publisher or other billing entity -- to purchase information at multiple web sites with single-ID and password convenience. No end-user software is required beyond a standard Web browser.

Q: What are the overall benefits?

- **UNIVERSAL SETTLEMENT** -- Publishers and online services have begun exploring ways to compensate each other for the services they provide to users [Advertising Age, Jan. 20, 1997, "Pay per view: Web sites seek deals with ISPs"]. Such contractual relationships will rapidly become unmanageable because of the variety of sources of information and users and the need to

have bilateral agreements among players. A single settlement facility, as with the long-distance telephone industry, is needed. Also, if users are forced to join information cartels of large publishers or user-owners, they will be denied choice and will be forced to accept bundled pricing.

- **UNIVERSAL CREDIT** -- Many web sites are enrolling users and accepting credit-card payments. But each of these relationships works only for that web site, much as a store-credit card issued by Sears, doesn't work at Target or Pennys. The experience in the consumer credit industry of a gradual conversion of most such accounts to VISA or MasterCard-backed systems demonstrates the desire for consumers and marketers to have less credit facilities rather than more which are universal in their application.
- **UNIVERSAL ACCESS** -- Publishers who seek to charge users on a subscription basis by definition exclude the vast majority of potential users who would buy a portion of the web site's offerings on a "per-click" basis. TVS, uniquely, offers the opportunity to "have it both ways." Just as conventional newspaper and magazine publishers have subscribers and single-copy sales, the Clickshare-enabled publisher can have subscribers, but also vend information to visiting Clickshare member users "by the click." In the proprietary online world (West, Lexis-Nexis, CompuServe, Dialog) this was not been technically feasible because of the lack of a universal public network, such as the Internet, that takes care of site access. TVS provides the vicarious billing relationship.

Q: Who's involved in the Clickshare/TVS system?

- **INFORMATION SELLERS** -- Operators of World Wide Web sites who wish to make money from the sale of information or software are called Publishing Members. Examples include: newspapers, magazines, specialty publications, new-media entrepreneurs, game vendors and software publishers.
- **BILLING AGENTS** -- Consumers have preexisting, ongoing credit relationships with billing agents who agree to become Clickshare Service Providers. In exchange for a negotiated share of the "Clickstream" revenue from information sales, these service providers assume responsibility for servicing and billing end users. Examples include: Internet Service Providers, newspapers, specialized publishers, online services, telephone companies, cable and utility companies, credit-card issuing banks, retailers and other consumer-credit entities.
- **CUSTOMERS** -- Internet users who have established an account with a billing agent and who seek convenient access to widely distributed digital information are called TVS Members. They are customers of their billing agent and need have no direct relationship with Clickshare Service Corp. or its licensee/operator.
- **CLICKSHARE SERVICE CORP.** -- Facilitating the authentication of Member Users, and storing records of their access to web sites is the Clickshare Access and Logging Service (CALS). Operated by Clickshare Service Corp. or its licensees, CALS is a fault-tolerant network of Internet servers which exchange real-time, encoded information with machines operated by information sellers and billing agents.

Q: What is the value of TVS to each of the constituents below?

INFORMATION SELLERS

- A way to get guaranteed payment for selling information on the Internet
- A third revenue stream after advertising and subscriptions
- A digital equivalent of "single-copy sales" to casual web-site visitors.
- A way to obtain anonymous user demographic and preference information without requiring registration.
- Enhances customer service through ability to personalize
- Enables site access by service class such as subscriber only
- Produces auditable, third-party "page-view" data for advertisers
- Low entry barrier, pay-as-you-profit cost structure

BILLING AGENTS ("Clickshare Service Providers")

- A new revenue stream -- selling information instead of just Internet connectivity or physical goods
- Greater user "stickiness" by providing added value of access to multi-site resources and information with single-bill and registration simplicity.
- Low entry barrier, pay-as-you-profit cost structure
- Leverage existing billing facility for profits at little incremental cost
- Provides credibility and co-marketing strength of an affiliate relationship
- Become a source of anonymous but user-specific market data on where customers are going for information and services
- Solidifies billing agent as "home port" for customer

CUSTOMER

- Convenience of single ID and password and one-stop registration for information and product access anywhere on Web which is Clickshare enabled
- Privacy-protected demographics are never accompanied by name, address or credit information when submitted to affiliated sites.
- Choice of billing agents (one or many)
- Ease of payment through single, periodic bill via existing credit facilities
- Requires no special end-user software and no new end-user credit relationship
- Instant point-and-click purchasing with authentication in background
- No transfer of credit-card information across the Internet
- Total control of who can use personal information
- User's address optionally protected from unwanted mail
- Parental control built and regulated by publisher not by government
- Nightly advisory of information purchases

CLICKSHARE SERVICE CORP. (or licensee/partner)

- Front-loaded revenues from CPM and CSP member enrollment fees
- Cost-based revenues from per-enabled-user fees
- Scaled, annuity revenue from per-click transaction fees
- Service fees for audience measurement data, installation and support
- Commissions on advertising sales (Adshare -- pay-per-view ads)

Q: Is Clickshare available now?

Trials of Clickshare are anticipated to occur early in 1999. A prototype demonstration is available at

<http://1999.clickshare.com/tryit/> Potential service providers and content providers should contact Clickshare Service Corp. to arrange to participate in trials.

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Clickshare is a U.S.-registered servicemark of Clickshare Service Corp.

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Clickshare Service Corporation

75 Water St.

Williamstown, MA 01267-0367 USA

VOICE: (413) 458-8001

FAX: (413) 458-8002

EMAIL: corp@clickshare.com

CLICK 201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Oliver, et al.

Serial No.: 09/036,236

Filed: March 6, 1998

For: SYSTEM FOR MANAGEMENT OF TRANSACTIONS ON
NETWORKS

Examiner: F. Thompson, Jr.

Art Unit: 2765

June 26, 2003Hon. Commissioner of Patents and
Trademarks
Washington, DC 20231

Dear Sir:

SECOND DECLARATION OF WILLIAM P. DENSMORE, JR.

I, William P. Densmore, Jr., do hereby declare:

1. I am a named inventor of the above patent application.
2. I submit this declaration in support of a demonstration of a prima facie entitlement to priority of invention with respect to Teper, US 5,815,665, claims 35-80 of which have been copied in the present application.
3. Attached are a compendium of and articles published between September 18, 1995 and September 23, 1996, which are more fully identified therein. These are believed to be true and correct excerpts of these articles.

4. These excerpts, together with the 1995 Oliver memo, are believed to support applicants' claim of invention prior to April 6, 1996, the effective application date of Topco et al.

5. The Clickshare™ service was experimental at all times at least prior to March 7, 1996. The system was made available under an "alpha" test, in which users were able to test compatibility with their Internet browsers, and certain aspects of system operation, in order to provide feedback to Newshare (and later Clickshare) regarding the operation of the system and any errors encountered. During this "alpha" test, no content was available for purchase, and no user accounts were charged for per-click access. User registrations, to the extent possible, were performed through Clickshare servers, and therefore there was no segregation of service provider and on-line provider.

6. The Clickshare™ service was not offered for sale at any time at least prior to March 7, 1996. No commercial terms for users, brokers, or service providers were established, and the system was incompletely developed. Unsolicited offers for sale or commercial use of the system were not accepted. No mechanism was established prior to March 7, 1996 for accepting clients nor customers.

7. An article published September 18, 1995 in *Step The Presses*, by Steve Outing, Planetary News LLC, states as follows:

Clickshare Internet Publishing Scheme Looks Promising

....The Clickshare system monitors and collects data on where the consumer has visited and purchased information, then sends the data back to the home publisher and the remote publisher. The remote publisher receives his share of the sale, the local publisher keeps a slice in compensation for the referral, and Newshare keeps a portion. And the participating publishers receive a detailed accounting of what consumers are reading, which can serve to provide advertisers with a verified account of online viewership.

The Clickshare concept has some wise thinking behind it. President Bill Densmore, a former newspaper publisher, has designed Clickshare as an open system supporting Internet standards. Consumers can use Clickshare with any Web browser software. It makes purchasing data on the Web simple; the consumer gets only one bill no matter where in the world she has purchased information. And a single password works everywhere. Credit card information is not transmitted over the Internet; rather, that data is kept solely by the local publisher. Consumers are kept track of by an alphanumeric ID number that is discernable only by the local publisher.

...Clickshare as a concept has a lot going for it. It would allow newspaper publishers worldwide to put price tags on their premium data online -- say, access to their electronic archive -- and easily permit anyone on the Internet to buy it without having to submit a credit card number.

8. Another article published October 9, 1995 by Keith Dawson in Tasty Bits from the Technology Front (TBTF), states:

Clickshare

Here is an appealing proposal, called Clickshare, from Newshare Corp. of Williamstown, MA (which bills itself as "The Internet's first news broker- age" -- though it seems to me that Clickshare's potential applications extend well beyond news gathering and distribution). I first read about it in *Online Business Today*. Clickshare addresses a number of the outstanding obstacles to online commerce:

- The lack of an economical way to track and bill for small-value transactions across many Net services
- The desire for anonymity in Net value transactions -- i.e., a virt[ua]l equivalent to cash
- Users' disinclination to send credit-card data over the Net
- Users' concerns about divulging personal information to a myriad of suppliers, in order to gain access to the content they offer
- The unwieldy and growing set of authentication/password information that each online user must track as s/he signs up for disparate Net services
- The requirement of advertisers to know, on at least a statistical / demographic basis, who is receiving their messages
- Parents' desire to keep offensive Web content from their children
(<http://www.atrria.com/~dawson/tbtf/archive/0031.html>)

....The Clickshare system tracks your Web-surfing activities, but anonymously, and accumulates similar data for all users throughout the system. This allows advertisers and publishers to access demographic reports of what users are requesting without compromising users' privacy.

9. An article by Rose Aguilar published March 18, 1996 in C|Net News states as follows:

Clickshare collects for online pubs

Technology trials have started for a new Internet payment system from Clickshare that will make it easier to pay for online subscriptions.

Called the Clickshare Access and Payment Service, the technology lets users bill charges from several online content publishers to a single billing account. ...

For users, the attraction is that they won't have to use their credit cards for small transactions, nor will they have to give their credit card numbers to multiple vendors to sign up for multiple online publications...

The catch is that the publisher must also have signed up for the Clickshare service. But the company hopes that publishers will be attracted to the service because it will make it easier to track customer billing, count the number of times a user views a given site, and monitor visits to advertiser-supported pages.

Two publishers are participating in the tests: Studio Briefing, a daily entertainment industry newsletter, and American Reporter, an online news daily.

The registration at Clickshare provides users with a single ID and password account and a list of publishers using the service. The system also supports authentication for intranets, officials said.

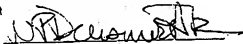
10. These articles therefore indicate that a single user account is maintained, with an anonymous alphanumeric ID number used to identify users to foreign sites, with a central server for coordination and centralized accounting. They further support applicants' conception of a system having a mechanism for sharing client information and charges among a plurality of service providers; a mechanism for allowing a client

registered with one service provider to access services of another service provider; a sending means; a sharing means; and an authentication/verification means.

11. It is therefore respectfully submitted that all pertinent claim elements were clearly shown to have been possessed by applicants prior to Teper's filing date.

Further Declarant Sayeth Not.

I hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


William P. Densmore Jr.

June 26, 2003
Date

Clickshare Clickshare in the News

The Internet's information utility

For the latest information on recent developments, or if parts of the Clickshare service are not working: see Clickshare Set Back.

(See also Recent Clickshare press releases. For an archive of older Clickshare press releases as well as current speeches, see Clickshare/Newshare Information Center.)

Click on any article (most recent ones first) to get to that clip.

CyberLand/David Hipschman: Making the Net pay Its way
*Editor & Publisher*Interactive /Hoag Levins: First to Achieve the Digital Equivalent of Single-Copy Newspaper Sales
The Netly News/Noah Robischon with Steve Baldwin: Micropaying Through the Nose
Interactive Age/John Evan Frank: Clickshare Culls Microrevenues
News.Com/Janet Kornblum: Is Web a field of dreams?
NetGuide/Reid Goldsborough: Digital News: Ripping Into Newspapers
Web Week/Bill Roberts: Micropayment Venture Pushes Centralized Billing
The New York Times CyberTimes Extra/Jamie Murphy and Ed Forrest: Who's doing all this measuring?
Stop the Presses/Steve Outing: Pay-Per-Click: The Next Great Online Revenue Stream?
Byte/Robert Hummel: How Java Can Pay the Rent
Interactive Age/John Evan Frank: Monitor monitored by Clickshare
Cowles/SMBJ Media Daily/Laurie Peterson: Christian Science Monitor To Launch Web Site, E-Mail Service
Mass Ill Tech/Pam Derringer: Clickshare eyes web, sees possible profit in pay-to-use browsing
WEBster/Cynthia Kurkowski: Web publishing: is fortune really just a click away?
Boardwatch/Duran Imboden: Self-publishing opportunities on the Internet
PC Week/Jim Kerstetter: Clickshare adopts pay-as-you-surf plan
CNet News/Rose Aguilar: Clickshare collects for online pubs
Stop the Presses/Steve Outing: Clickshare has a lot going for it
Web Week/Jeremy Carl: making a subscription-based model work
WEBster: has Clickshare the "exclusion" to sell info by the page on the Web?
TBT/Keith Dawson: Clickshare addresses outstanding obstacles

Making the Net pay its way

Excerpts from an article by David Hipschman, editor of the Casper, Wyoming Star Tribune, in the September 23, 1996 issue of his CyberLand online column. Here's where the original of this article can be found.

Software developers, Web page designers and companies that provide Internet connections have been making money. But the "content providers," as the writers, artists and editors that produce the words and images embedded in the Net are called in this strange new world, have wondered how they would get paid, as have the brave, foolhardy or rich souls that "publish" them.

Marketers have declaimed that the economic model of the Net only needed a secure, verifiable transaction methodology (they talk that way) to become viable. Meanwhile, pundits have proclaimed that the "culture" of

<http://www.nlightning.com/clickshare/pubpack/clickelips.html>

6/25/2003

the Net necessitated that information remain free -- a prospect as unappealing for a writer as a rejection slip...

This week, however, a Massachusetts-based corporation may have actually changed the nature of the Net. Clickshare launched its pioneer "multi-site, single-ID, Internet micropayment system" and users began clicking on -- and paying for -- information online.

Some may think Clickshare is the beginning of the end for free access to information on the Web. Others may conclude that it is the "killer ap" that will finally make Web publishing a reality. Whatever you think, Clickshare's launch is a pivotal moment for the Net.

[Return to top \(index of clips\)](#)

Universal Access & Transaction Management System for Pay-to-View Web Newspapers First to Achieve the Digital Equivalent of Single-Copy Newspaper Sales

Excerpts from an article by Hoag Levins, Editor, in the September 20, 1996 issue of Editor & Publisher Interactive. Here's where the original of this article can be found.

WILLIAMSTOWN, Mass., Sept. 18 (F&P Interactive)--In the latest attempt to turn the elusive promise of the Internet into actual publishing profits, a company formed by a newspaper publisher and a university mathematician has launched the Clickshare "single transaction enabling" utility that supports the digital equivalent of single-copy newspaper sales across the Web.

While Clickshare Corp.'s service is the latest of several entries in the new Internet field of "transaction enabling" systems, it is the first to comprehensively address distribution problems specific to Web-based newspapers and magazines. Most newspapers on the Web would like to charge non-subscribing users a small amount of money to access single news articles but have thus far not found a practical system to accomplish this...

Last week--twenty-four months after they first began--Densmore and Oliver launched their new Internet Clickshare service. In the first two days of operation, it processed \$62.60 worth of transactions--hardly an amount to make the firm an industrial titan. However, industry watchers say the concept, if accepted by users and publishers, has the potential to spawn a sprawling Internet utility, stitching together thousands of pay-to-view publishing sites charging small fees (in the range of ten to twenty-five cents per document view) to huge numbers of visitors.

[Return to top \(index of clips\)](#)

Micropaying Through the Nose

Excerpts from an article by Noah Robischon with Steve Baldwin in the September 19, 1996 online issue of The Netly News, published by Time Inc Pathfinder. Here's where the original of this article can be found.

Way back when The Netly News was but a gleam on our screen -- before syndication, before becoming a

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multinational corporation and before Josh became the dictator of a small Eastern European nation -- we considered using a micropayment business model.

We reasoned that if each of our millions of readers were willing to plunk down a nickel for every article they read, we'd have the biggest bellies in Fat City. Hell, if a mere 100,000 people a day came through our site (remember, there are supposedly 15 million active Internet users), we'd be making \$25,000 per week. And even we could live on that (though Josh would have to give up his three-hour-per-day habit). So when Clickshare announced last week that micropayments were finally a reality, we asked where to sign.

"Most of the financial mechanisms that people are coming up with are trying to capture people rather than release them," Clickshare marketing director Felix Kramer says with postmodern verve. Clickshare, which has netted \$175.85 since last Friday, "utilizes the interconnectedness of the Web."

Here's how: Netly Publishing would enter into a deal with Clickshare and install its software on our servers. Next we would tell all of our readers that we were going to start charging them \$.10 and up for each article they read on Netly. Clickshare then tracks readers' usage and supplies a record of their "page visits," including session IDs and time stamps, and submits a bill based on that usage from Netly Publishing. Clickshare keeps 20 percent of the tab, 30 percent is kicked back to the company that bills the users and provides the connectivity, and the other half goes back into the Netly coffers (note that if Netly acts as the bill collector/ service provider, a full 70 percent of the total bill goes into our pockets). All the user sees is an aggregate bill at the end of the month.

"I think this is a way that writers can finally end up getting paid for their writing," said Kramer. It's the dawn of a new age -- none too soon if you ask us.

Right now the most lucrative aspect of the Clickshare system is its ability to gather detailed user demographics. Beyond that, Kramer admits that "we're not sure about these models we're implementing. It may change once we gain more experience."

The whole venture depends on Clickshare's ability to achieve step one -- luring The Netly News Networks Publishing Ventures SA and other content providers into using its system. Clickshare essentially has to become the network to become viable. In truth, if you can become the network, you've got it made anyhow. We're not certain that Clickshare is really ready to go head-to-head with Microsoft, but Kramer assures us that he "expects to be talking to a lot of Fortune 500 companies" once Clickshare finds a CEO.

Of course, the operation also depends on the readers' willingness to shell out for the articles they read. To that end, Team Netly has put together a special Consumer Report on navigating the Web with Clickshare. We sent out our seasoned subjective site appraiser, Steve Baldwin, and after much deliberation, he arrived at a definitive judgment of how much these popular web pages are actually worth -- and why.

[We at Clickshare couldn't resist including the story's sidebar, but think it's only appropriate that you go to the original story to get the links for the items below -- and that way you can appreciate the original design too.]

Four11 Directory Services (\$0.30 per click): Being able to stalk your former co-workers and significant others has to be worth something.

USA Today's Lotto Results (\$0.18 per click): You didn't win again, loser! (there -- I've just saved you \$0.18).

Any Quake Cheat Pages (\$0.75 per click): Look, you've already spent \$49 on this game -- spend a few more bucks to get through the damned thing.

Internet Underground (\$0.08 per click): The going rate for deep-thinking repurposed journalism (we might shell

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Clickshare in the News (mirror)

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out a quarter for the whole site.)

Playboy (\$0.50 per click): Excellent editorial content.

The Charo Calender (\$0.15 per click): She's added two performing elephants to her act. Wouldn't you pay \$0.15 to know this?

Search Voycur (\$0.45 per click): Horrifyingly funny. We could watch this for hours and rack up a big bill.

Seducing Your Lover by Sign (\$1.00 per click): Worth at least a buck if it works.

Any Search Engine (\$0.00 per click): Never in a million years would we pay for searching. If these greedy vendors start charging, tell them you're going back to the World Wide Web Worm.

The Nety News (\$1.75 per click): Cutting-edge web journalism (besides, we need to raise funds for Stamper's one-way bus ticket to Comdex.)

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Clickshare Culls Microrevenues: Surfers able to buy content with mini-payments

Excerpts from an article by John Evan Froom in the September 17, 1996 online issue of Interactive Age, published by CMP. Here's where the original of this article can be found.

Sixty-two dollars and sixty cents might not seem like a lot of cash, but to the folks at Clickshare Corp. it is history in the bank.

That microscopic amount -- not enough to buy dinner for four at a posh restaurant -- is the money collected over the weekend by Clickshare's just-launched Internet micropayment system, which enables people to buy individual articles over the Internet for as little as 10, 25 or 50 cents.

Only about a dozen registered buyers conducted online purchases between Friday and Sunday, but Clickshare says that's not the point. It claims the launch of its system marks the first time a technology has been implemented to allow publishers to charge for information on the Internet, as opposed to giving it away gratis.

The launch of Clickshare makes good on a promise. The company announced its plans to introduce a publisher's commerce tool more than a year ago. It has steadily advanced its strategy by developing the technology behind its multi-site payment system....

A Williamstown, Mass.-based Internet start-up, Clickshare beats to the punch no less than IBM, which is pushing its similar Cryptolope technology as the gateway to for-pay information. But it might face an uphill climb in continued competition with Big Blue. Though Cryptolopes are just coming out of the test phase, IBM's Infomarket unit claims it has as many as 40 contracts with publishers to use its technology to sell articles over the Net...

Of course, both Clickshare and Cryptolopes also face an unknown element - whether consumers will be willing to pay for information delivered over the Net. ...

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Is Web a field of dreams?

Excerpts from an article by Janet Komblum published September 16, 1996 in C|Net's online News.Com. Here's where the original of this article *may* still be found.

Clickshare today launched a service that may help answer the most burning questions for Web publishers: If you build it, will they come? And perhaps more important, will they pay for it?

Clickshare has a technology that can charge consumers every time they call up information on the Web. Users register their credit cards with Clickshare, log on, and then can pay for news on a "click-as-you-go" basis....

But it's unclear whether people will pay for information on the Web when they can find it in other ways for free, said Mark Loncar, a partner for marketing technologies with CKS Partners....

Bill Densmore, Clickshare's chairman, summed up his company's strategy this way: "We're the Web's first working micropayment service. Now, publishers can charge for valuable information on the Internet, rather than giving it away."

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Digital News: Ripping Into Newspapers

Excerpts from an article by Reid Goldsborough in the September, 1996 issue of NetGuide. The original of this article can be found by an archival search for Clickshare.

Another option being explored by online publishers is pay-per-click services. With Clickshare, the monitoring system that facilitates such pay-as-you-go services, sites can set rates as low as 10 cents per page. Even if an online publisher doesn't charge for a hit, it could use Clickshare to track usage and provide this information to advertisers, says Bill Densmore.

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Micropayment Venture Pushes Centralized Billing

Excerpts from an article by Bill Roberts in the June 17, 1996 issue of Web Week. Here's where the original of this article can be found.

Look ahead six months. Dozens of Web sites are charging subscription fees, and more are joining them every day. Pay-per-view emerges as the standard way to subsidize content, and surfers pay every time they hit the water.

Now consider this: Would this reality be more palatable if the audience could pay a central billing entity instead of getting a bill from a dozen different marketers? ...

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Steve Outing, an Internet publishing consultant and president of Planetary News in Boulder, Colo., said, "Clickshare raises the bar and gives newspapers a lot more options about how to bring in new revenue. Until now the best you could do was a subscription model." ...

Bill Harvey, vice chairman of Next Century Media Inc., a Sausalito, Calif.-based interactive media consulting, measurement and tracking firm, added that "Clickshare starts with the philosophy that you can get some money from the consumer as long as you keep the price per page quite low, 10 cents or a quarter. You have to have a three-legged stool to make money--online shopping, ads and consumer subscriptions. Clickshare seems to understand this better than anyone else. I think they're going to succeed, but it has to be tested." ...

The Monitor expects to test a pay-per-piece model for its voluminous archive, said David Creagh, the Monitor's electronic publishing manager. "We adopted it because we think they have the most sophisticated technology we've seen for raw audience data--who goes where for what," he said. "We're going to need that but don't know how we'll use it." ...

Jonathan Roosevelt, an associate at Battery Ventures in Boston who specializes in Internet ventures, finds the Clickshare model intriguing. "They have a fantastic technology. It really is sophisticated, neat stuff. I'm not sure that they're applying it in the best way," he said. ...

But with all the free content, do Web users want to pay at all? Consultant Outing isn't sure. "The difficult part for magazine publishers and newspapers is figuring out what people are willing to pay even for a few pages," he said. "As people see more of that, it will become more accepted, but initially that will be tough going. Paying for archive access is a no-brainer."

Creagh believes people will pay. Earlier this year the Monitor put up a Bosnia site. When Creagh later asked 2,500 site visitors if and how they'd be willing to pay, more than half were game for a micropayment system like Clickshare.

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Who's doing all this measuring?

Excerpts from an article by Janie Murphy and Ed Forrest in the May 26, 1996 issue of The New York Times CyberTimes daily. Here's where the original of this article can be found (if you're a registered subscriber).

A number of companies now are trying to bring some calm to the seeming madness of measuring traffic on World Wide Web sites -- and on the banners advertisers pay to place on those sites -- though each has its own view of how and what to measure....

Devising more accurate and efficient methods of a Web site's popularity among Internet users is a battle that's just now beginning....

Once a user is registered with Clickshare, for example, he or she can surf from Clickshare site to Clickshare site without having to re-register at each stop. Clickshare registrants can also use their account with the company to pay what they owe on any Web purchase....

Currently, the Christian Science Monitor, American Reporter, and Studio Brieling use the Clickshare system.

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Pay-Per-Click: The Next Great Online Revenue Stream?

Excerpts from an article by Steve Outing in the May 8-9, 1996 online issue of Stop the Presses!, the newspaper New Media News & Analysis column hosted by Editor and Publisher. Here's where the original of this article can be found.

In recent conference presentations, I've been telling my audiences that the model that makes the most sense for newspapers operating on the Internet right now is to give as much away free as possible, and concentrate on attracting advertisers because they will carry most of the weight in supporting newspaper Web operations in the future. Densmore's pay-per-click strategy actually fits in well with this advice, in that pay-per-click allows a publisher to charge potentially small amounts (microtransactions) for premium content that is worth paying for from the consumer perspective.

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How Java Can Pay the Rent

Excerpts from an article by Robert Hummel on page 42 of the June, 1996 issue of Byte magazine. (This article is not yet online).

Felix Kramer, marketing director at Clickshare (Williamstown, MA), another company that's exploring the field of electronic commerce, sees this as one of the functions of the Web distributor. "People are going to deposit their applets at payware sites on the Web," he explains. "Other people will collect the fees for them and send them a monthly check."

Kramer envisions a billing model for applet use based on data transferred, not on time used. Each download of an applet might cost a few cents or dollars but would allow the use of an applet during an entire session. The alternative, in which the applet might be equipped with a built-in expiration timer, interrupting your application to demand another nickel, is not as likely to occur. "The Internet is a stateless system," Kramer says. "Time as a method of measurement will go away."

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Monitor Monitored by Clickshare

Excerpts from an article by John Ivan Frook in the May 7, 1996 online issue of Interactive Age, published by CMP. Here's where the original of this article can be found.

The Christian Science Monitor plans to include 15 years of newspaper archives at its soon-to-debut Web site. The venerable paper also announced it has picked Clickshare Corp. to provide traffic measurement and microtransaction strategies for the site. The Monitor's endorsement is a major boost for Clickshare, which has been one of the least hyped of the Web traffic measurement companies to date.

Monitor electronic publishing manager Dave Creagh said Clickshare will be used to measure repeat visitors to the site. He said the determining factor in selecting Clickshare was the firm's ability to track unique users

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without requiring on-site registration and password access.

"(Clickshare's) technology to track visitors, including time spent per visit, is the most sophisticated we've seen," said Creagh. He added that Clickshare's willingness to work with third-party auditors, such as NetCount and I/Pro, also factored in the decision. "We feel that Clickshare will soon set the standard for allowing transaction-based pricing on the Internet."

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Christian Science Monitor To Launch Web Site, E-Mail Service

Excerpts from an article by Laurie Peterson in the May 6, 1996 online issue of Media Daily: Internet Information, published by Cowles/SIMBA. Here's where the original of this article can be found.

The Christian Science Monitor will unveil a new Web site in two weeks that features a 15-year searchable archive, 24-hour real time audio newscasts from Monitor radio and a crossword puzzle with two levels of difficulty -- one of which lets you cheat a little.

The Electronic Edition of The Christian Science Monitor at <http://www.csmonitor.com> will be free to users through the summer, according to Dave Creagh, electronic publishing manager. Some areas will require registration. Two pricing models will be tested this fall -- a monthly subscription rate of about \$6 for unlimited access and a transaction-based plan that would charge, say, 10 cents to view a political cartoon. ...

The Web site will employ Clickshare Access and Payment Service software to track usage. The software gives users a "digital calling card" so they can log in once and charge purchases at many Web sites to a single account. It also tracks visits to advertiser-supported pages.

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Clickshare eyes web, sees possible profit in pay-to-use browsing

Excerpts from an article by Pam Derringer in the April 8-9, 1996 issue of Mass High Tech, New England's High Technology newspaper. Here's where the original of this article can be found.

A Massachusetts-based "virtual company" with a handful of employees scattered across the country is betting that the practice of paying for information on the Web will become as accepted as the once-preposterous notion of paying to watch TV....

...Clickshare's future is bright, despite the rise of companies such as Open Market in Cambridge that are also beginning to form business networks. But Open Market collects user/payer information and stores it in one location, Densmore said. Unlike Open Market, Clickshare's user data will be decentralized among the network of affiliated publishers, with each user giving information to a publisher they trust rather than to a large centralized database with which they have no contact, he said.

Densmore is unfazed by prospective rivals.

"The numbers are so huge now that nobody is competing with anybody," Densmore said. "There is enough

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Web publishing: is fortune really just a click away?

Excerpts from an article by Cynthia Kurkowski in the April 16, 1996 issue of Webster -- The Cyberspace Surfer online newsletter. Here's where the original of this article can be found (if you're a registered subscriber).

The ability to support microtransactions -- purchases under a dollar -- across the Internet promises to drive the sale of information on the World Wide Web. Publishers and authors will be able to sale their works by the article or chapter, or quotable text for that matter. Suddenly, publication archives will become a new revenue source -- not just supported by Web advertising banners, but supported by user purchases of information. Ten cents here, a dollar there, it all adds up to big revenue gains. Revenue publishers might otherwise never have generated under the traditional subscription or newsstand model...

One secure microtransaction system developed by Clickshare Corp., is being tested this spring. (See WEBster article "Clickshare Begins Trials of Clickshare Access & Payment Service" 04.02.96.) With the exception of the initial user registration which must be conducted offline, the Clickshare Service operates online, verifying users, tracking user purchases and delivering user activity reports to its publishers for billing and collection....

"Clickshare provides another model for supporting the sites," said Felix Kramer, president of Kramer Communications and spokesperson for Clickshare. "Sites will get some revenue by casual clickers."

The Unix-based Clickshare Service is in its initial phase of testing by publishers Studio Bricfing and American Reporter. Both publishers are looking for a secure payment system which allows them to sale their wares for under a dollar while still supporting high-priced purchases. Clickshare's flexible pricing model attracted the online daily American Reporter. The American Reporter is marketing dailies in two formats: an all-in-one newsstand price and per-article rate ranging from \$1 to \$30. The Clickshare system can deal with the complexities of such a variable pricing structure with its unlimited pricing levels.

[from the issue's table of contents:]

But will the model catch on? It may all come down to pricing.

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Self-Publishing Opportunities on the Internet

Newshare: a new opportunity for nonfiction writers

Excerpts from an article by Durant Imboden, author of the "Putting the Net to Work" column in the April 1996 issue of Boardwatch magazine. Here's where the original of this article can be found.

News reporters are another group of writers who hope to make money on the Web. Newshare Corporation is an online syndicate that expects to help freelancers and publishers earn revenues from worldwide dissemination of their work.

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"We gather the work of content providers like newspapers, broadcasters and independent writers and artists," the company explains in its recruiting pitch. "Then we make it possible for each of these providers to share their content with their own customers, subscribers and users all under a single system of validation, tracking and payment."

...Right now, Newshare's content is being offered free of charge, so it's impossible to guess how successful the concept will be when billing starts in mid-1996. To draw your own conclusions, and to see what kinds of content providers the "Clickshare" service attracts, keep an eye on <http://www.newshare.com>.

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Clickshare adopts pay-as-you-surf plan

Excerpts from an article by Jim Kerstetter appearing in the March 25, 1996 PC Week, published by Ziff-Davis. This article is no longer online.

Clickshare Corp. has developed software that gives World-Wide Web site publishers a way to charge users based on their activity.

The Williamstown, Mass., startup's Access and Payment Service uses a "digital calling card" process in which users establish a line of credit with the site simply by phoning the publisher. Clickshare's Web server application is then initiated when a user re-enters a site.

The system keeps track of a user's activity on the site, with each page having its own price. The lowest per-hit cost that Clickshare can afford is about 10 cents, company officials said.

Some users, although pleased by the technology, said they hope the base fee will drop.

"I think the system should be flexible enough to charge pennies," said Joe Shea, editor in chief of the Internet magazine American Reporter, in Hollywood, Calif. Shea is one of two users currently testing Clickshare's Access and Payment Service software.

...Clickshare's Access and Payment Service is now available for Digital Equipment Corp.'s Alpha servers running Unix and Intel Corp.-based machines running Unix. Other platforms will follow this year, officials said.

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Clickshare collects for online pubs

Excerpts from an article by Rose Aguilar published March 18, 1996 in C|Net News. Here's where the original of this article *may* still be found.

Technology trials have started for a new Internet payment system from Clickshare that will make it easier to pay for online subscriptions.

Called the Clickshare Access and Payment Service, the technology lets users bill charges from several online content publishers to a single billing account. ...

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For users, the attraction is that they won't have to use their credit cards for small transactions, nor will they have to give their credit card numbers to multiple vendors to sign up for multiple online publications...

The catch is that the publisher must also have signed up for the Clickshare service. But the company hopes that publishers will be attracted to the service because it will make it easier to track customer billing, count the number of times a user views a given site, and monitor visits to advertiser-supported pages.

Two publishers are participating in the tests: Studio Briefing, a daily entertainment industry newsletter, and American Reporter, an online news daily.

The registration at Clickshare provides users with a single ID and password account and a list of publishers using the service. The system also supports authentication for intranets, officials said.

Clickshare is a privately held spin-off of Newshare Corp.

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Clickshare Internet Publishing Scheme Looks Promising

Excerpts from an article published September 18, 1995 in *Stop The Presses*, published five-days a week by Steve Outing, Planetary News LLC, and owner of the online-news and online-newspaper mailing lists. The column, found at STP archive, is sponsored by *Editor & Publisher* magazine. Here's where the original of this article may still be found.

...The Clickshare system monitors and collects data on where the consumer has visited and purchased information, then sends the data back to the home publisher and the remote publisher. The remote publisher receives his share of the sale, the local publisher keeps a slice in compensation for the referral, and Newshare keeps a portion. And the participating publishers receive a detailed accounting of what consumers are reading, which can serve to provide advertisers with a verified account of online viewership.

The Clickshare concept has some wise thinking behind it. President Bill Densmore, a former newspaper publisher, has designed Clickshare as an open system supporting Internet standards. Consumers can use Clickshare with any Web browser software. It makes purchasing data on the Web simple: the consumer gets only one bill no matter where in the world she has purchased information. And a single password works everywhere. Credit card information is not transmitted over the Internet; rather, that data is kept solely by the local publisher. Consumers are kept track of by an alphanumeric ID number that is discernable only by the local publisher.

...Clickshare as a concept has a lot going for it. It would allow newspaper publishers worldwide to put price tags on their premium data online -- say, access to their electronic archive -- and easily permit anyone on the Internet to buy it without having to submit a credit card number.

This idealistic vision of Internet publishing commerce is predicated, of course, on Newshare signing up a critical mass of publishers to be part of the Clickshare network. That's going to be its biggest challenge, especially since Newshare is a small company without a proven track record. I, for one, wish them luck.

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Newshare Enters Pay-As-You-Click Market

Excerpts from an article by Jeremy Carl published in Oct. 1995 in **Web Week**, published by Mecklermedia. This article is no longer online at the site; current issues are found at **Web Week**.

Williamstown, MA-based Newshare has begun alpha-testing its new Clickshare pay-per-click system, which is scheduled to debut as a full-fledged service in early 1996.

...Other subscription-based programs have appeared on the market in recent months, but Newshare is positioning its product as differing from its competition in terms of its pricing structure. The company will go after low-end subscriptions by enabling individual providers to charge as little as 10 cents per page and up, making transactions that would be impossible or worthless with a credit card economically feasible. Revenues from such sales will be divided among the publisher of the content (royalty), the referring publisher (referral commission), and Newshare, which will take a percentage as a transaction fee (tentatively set at 15 percent).

Newshare President Bill Densmore explained a hypothetical transaction with his system. "Let's say you click on a link from a story about the Boston Red Sox in the San Jose Mercury News. The link takes you to the Boston Globe's Web site, where another story is. Using Clickshare, the San Jose Mercury News, as the referring publisher (the source of the link) would take a certain percentage of the transaction and the Boston Globe (the actual publisher of the article) would also take a percentage." For this system to work, both must be running the free Clickshare software.

While the Web has always offered easy navigation between content on different sites, products such as Newshare may make the subscription-based model of Web usage a more common phenomenon. "We're creating a platform for publishers to share users and share content without having to surrender their copyright, without selling physical control of their material," said Densmore.

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Clickshare Promises Publishers a Way to Make the Web Pay

Excerpts from an article published October 3, 1995 in **WEBster**, the online biweekly published by Tabor Griffin Communications. Here's where the original of this article *may* still be found. For information, see **WEBster**.

Williamstown, Mass. -- Publishers can stop hanging their heads against the free content wall, maybe. Late last month, Newshare Corp. announced they had developed the excelsior that will allow Web businesses to sell information by the page.

Called Clickshare, the system is run from the publisher's server and requires no special consumer software. It also handles third-party usage tracking and allows users to invoke automatic parental control.

"Much of the publishing world has held back from participating in the Internet because it lacked a way to charge for information and a way to verify viewership to advertisers," said Bill Densmore, Newshare Corp. president and co-founder. "Clickshare presents a solution to both problems. Clickshare addresses the issue of how to obtain revenue from per-query access to content or databases."

... "And users can have a single billing relationship with a publisher or Internet service provider yet surf the net freely, purchasing words, sounds or pictures from any Clickshare-enabled site without having to constantly re-

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register or recall multiple passwords," Densmore said.

Consumers enter the Clickshare universe by registering with a single, independent publisher (or more if the user desires multiple account relationships). Any publisher with the system might then sell a hypertext "page" of information in response to a user's click for a price of 10 cents or less. A range of higher charges are fully supported, as well, if desired by the publisher. The Clickshare system will then charge the home-base publisher of the remote user the 10 cents and will distribute a portion as a royalty to the selling publisher, a portion as a commission to the referring publisher and will retain a portion as a transaction fee....

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Clickshare

Excerpts from an article published October 9, 1995 by Keith Dawson in his twice weekly column, Tasty Bits from the Technology Front (TBTF). Here's where the original of this article *may* still be found.

[Here is an appealing proposal, called Clickshare, from Newshare Corp. of Williamstown, MA (which bills itself as "The Internet's first news broker- age" -- though it seems to me that Clickshare's potential applications extend well beyond news gathering and distribution). I first read about it in *Online Business Today*. Clickshare addresses a number of the outstanding obstacles to online commerce:

- The lack of an economical way to track and bill for small-value transactions across many Net services
- The desire for anonymity in Net value transactions -- i.e., a virtual equivalent to cash
- Users' disinclination to send credit-card data over the Net
- Users' concerns about divulging personal information to a myriad of suppliers, in order to gain access to the content they offer
- The unwieldy and growing set of authentication/password information that each online user must track as s/he signs up for disparate Net services
- The requirement of advertisers to know, on at least a statistical / demographic basis, who is receiving their messages
- Parents' desire to keep offensive Web content from their children
(<http://www.atria.com/~dawson/tbtf/archive/0031.html>)

....The Clickshare system tracks your Web-surfing activities, but anonymously, and accumulates similar data for all users throughout the system. This allows advertisers and publishers to access demographic reports of what users are requesting without compromising users' privacy.

Clickshare is not the first proposal of this type but it may be the most comprehensive to date. It combines features of Digicash's ecash (<http://www.digicash.com/ecash/ecash-home.html>), IPro's I/CODE system (<http://www.ipro.com/>), and some of the back-office functions of Open Market (<http://www.openmarket.com/products/ProdDescrTMS.html>). It requires no hardware or software at the user end. And it offers the advantage to the user of entrusting personal information only to one single organization that s/he can freely choose.

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CLICKSHARE UNIVERSAL-ID, PROFILING AND MICRO-TRANSACTION SYSTEM ENTERS ALPHA; PERSONALIZED "TEST DRIVES" BEGIN

WILLIAMSTOWN, Mass., Oct. 23 -- Newshare Corp. begins shipping to selected publishers this week the alpha version of its breakthrough Clickshare(SM) system to track and settle Internet-wide micro- transactions.

"Clickshare removes one of the biggest barriers to the evolution of the Internet by giving users universal-ID access to a free market for digital information," said Bill Densmore, Newshare president and cofounder. "Yet the information -- and the user relationship -- remain physically controlled by the publisher."

Clickshare's personal Newshare(sm) topic-profiling and custom-linking facilities are open for public use at <http://www.clickshare.com/tryit.html> Transaction-handling capabilities, and an initial base of Publishing Members, will be launched in early 1996.

"At that point, publishers will be able to sell each others' information for as little as a dime per click, exchanging royalties and commissions seamlessly," added Densmore. "Internet Service Providers will be able to act as on ramps into this content universe as well."

Clickshare requires no special software for consumers beyond their Web browser and costs a publisher as little as \$795 to join. Publishers can sell information by subscription or per-query to their own users, and set all pricing. Newshare is now soliciting a broader group of "beta" publishers.

"Publishers thinking toward the next century want to maintain a close relationship with their users," says David M. Oliver, Newshare's managing director-technology and principal Clickshare author. "And this implies registering them, profiling their interests and preferences, authenticating and verifying their use of resources, and billing them for charged items. Clickshare does this for publishers and for users in background, not in-your-face."

WHAT IS CLICKSHARE(sm)?

Clickshare is a complete, distributed, user-management system which provides the only true third-party validation of web usage. It differentiates "eyeballs" rather than just counting them. It protects personal privacy and the publisher/subscriber relationship.

Clickshare(SM) permits consumers to access information on multiple, unrelated Internet Web servers with a single ID and password. It gives publishers revenues not only from their own information but from the information their users buy elsewhere. And it gives advertisers the best way to measure web traffic by specific user.

"Clickshare's versatile architecture is core technology for a worldwide free market for digital communications -- a true information exchange," said Densmore.

http://www.newshare.com/News/alpha_launched.html

6/25/2003

Newshare Corp., is based in Berkshire County, Massachusetts, a region which has spawned several multimedia startups because of its high quality-of-life, accessibility to New York and Boston and good talent pool. Formed in September, 1994, it is privately held.

HOW IT WORKS

Clickshare has two principal components, Oliver says. Clickshare-enhanced Web server software runs on publishers' computers as a primary piece of controlling software or as an adjunct to other UNIX-based server software. It logs user registration, authentication, personalization and micro- transactions.

The second piece of essential software, the Clickshare token-validation service (TVS) server, is run by Newshare Corp. or licensees. It creates and validates authentication tokens, brokers non-personal user preferences among publishers, and maintains "page visit" records from multiple independent sites sortable by anonymous user number, page visited and site ID.

"At no time does Clickshare know a user's name or demographic profile," says Oliver. "Only the user's home-base publisher has this information."

Clickshare has been called an example of "wise thinking" (Steve Outing, Editor & Publisher Interactive, Sept. 18, 1995) and "the excelsior that will allow web businesses to sell information by the page" (WEBster, Oct. 3, 1995).

Each user has a single "home base" at a Publishing Member (likely to be a local or speciality publication with whom they have a continuing relation). Clickshare users register just once with their home base, providing credit-card information by phone, fax, mail or secure Internet connection. At no time do credit-card numbers or other personal information traverse the Clickshare system.

Thereafter, a user begins a Clickshare(sm) session as simply as logging in to the online world in the first place. The user must enter a personal ID and password just once during each session. In response, their home Publishing Member provides them a personalized, updated, jumpoff page of useful links, based on the personal topical-interest profile the user provided at initial registration.

As they browse effortlessly to Clickshare-enabled and other sites, users can be confident that the link between their identity and their tracks does not go beyond their home Publisher. Clickshare provides mechanisms to establish charge limits and receive periodic reports of charges.

The Clickshare-enhanced Web Server -- which is browser independent -- is provided to Member Publishers by Newshare Corp., free under license. Newshare's back-end service network exchanges data with the Internet servers of Clickshare-enabled sites, validating users and tracking all discrete page accesses -- chargeable or free -- across every participating site.

Clickshare tracks content served to users regardless of the location of their "home" Publishing Member. Aggregate micro- charges, settled monthly or more frequently, allocating commissions, royalties and transaction fees, thus form the basis of a system resembling an ATM network.

Clickshare leaves to each Publishing Member the marketing contours of its relationship to its customers. Each Publishing Member is thus free to use its own model for user subscription or per-page rates.

A portion of all fees accumulated by a user for all visited Clickshare-enabled sites is retained by the user's home Publishing Member. This is termed a "referral commission." And Newshare retains a portion for its role in tracking and clearing transactions. At least 50 percent of each transaction goes to the content owner as a royalty.

Clickshare(sm) enters alpha; "tearives" available

Page 3 of 3

MORE THAN IP NUMBERS

Beyond the model of payment for access to information, because it tracks known users (rather than Internet Protocol (IP) numbers), Clickshare may also serve as a third-party circulation/viewership auditing mechanism for the advertising and publishing industry, while leaving to users control of release of demographic and other data, and respecting their desires for privacy.

"This transparent and efficient mechanism makes it economically practical to bill information purchases of as little as a dime and possibly less," says Oliver. "Thus Clickshare provides the platform on which the consumer of the 21st century can freely and conveniently access independently owned information worldwide, paying through existing credit structures."

For more news and information, send email to [info\(at\)newshare.com](mailto:info(at)newshare.com) or see:

<http://www.clickshare.com/Clickshare/>.

"Clickshare" and "Newshare" are registered servicemarks of Newshare Corp.

NEWSHARE QUICK LINKS TO:

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Newshare Corp.

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EMAIL: mail@newshare.com

CLICK 201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Oliver, et al.
Serial No.: 09/036,236
Filed: March 6, 1998
For: SYSTEM FOR MANAGEMENT OF TRANSACTIONS ON NETWORKS
Examiner: F. Thompson, Jr.
Art Unit: 2765

June 26, 2003

Hon. Commissioner of Patents and
Trademarks
Washington, DC 20231

Dear Sir:

SECOND DECLARATION OF WILLIAM P. DENSMORE, JR.

I, William P. Densmore, Jr., do hereby declare:

1. I am a named inventor of the above patent application.
2. I submit this declaration in support of a demonstration of a prima facie entitlement to priority of invention with respect to Tepet, US 5,815,665, claims 35-80 of which have been copied in the present application.
3. Attached are a compendium of and articles published between September 18, 1995 and September 23, 1996, which are more fully identified therein. These are believed to be true and correct excerpts of these articles.

4. These excerpts, together with the 1995 Oliver memo, are believed to support applicants' claim of invention prior to April 6, 1996, the effective application date of Teper et al.

5. The Clickshare™ service was experimental at all times at least prior to March 7, 1996. The system was made available under an "alpha" test, in which users were able to test compatibility with their Internet browsers, and certain aspects of system operation, in order to provide feedback to Newshare (and later Clickshare) regarding the operation of the system and any errors encountered. During this "alpha" test, no content was available for purchase, and no user accounts were charged for per-click access. User registrations, to the extent possible, were performed through Clickshare servers, and therefore there was no segregation of service provider and on-line provider.

6. The Clickshare™ service was not offered for sale at any time at least prior to March 7, 1996. No commercial terms for users, brokers, or service providers were established, and the system was incompletely developed. Unsolicited offers for sale or commercial use of the system were not accepted. No mechanism was established prior to March 7, 1996 for accepting clients nor customers.

7. An article published September 18, 1995 in Stop The Presses, by Steve Outing, Planetary News LLC, states as follows:

Clickshare Internet Publishing Scheme Looks Promising

....The Clickshare system monitors and collects data on where the consumer has visited and purchased information, then sends the data back to the home publisher and the remote publisher. The remote publisher receives his share of the sale, the local publisher keeps a slice in compensation for the referral, and Newshare keeps a portion. And the participating publishers receive a detailed accounting of what consumers are reading, which can serve to provide advertisers with a verified account of online viewership.

The Clickshare concept has some wise thinking behind it. President Bill Densmore, a former newspaper publisher, has designed Clickshare as an open system supporting Internet standards. Consumers can use Clickshare with any Web browser software. It makes purchasing data on the Web simple; the consumer gets only one bill no matter where in the world she has purchased information. And a single password works everywhere. Credit card information is not transmitted over the Internet (rather, that data is kept solely by the local publisher. Consumers are kept track of by an alphanumeric ID number that is discernable only by the local publisher.

...Clickshare as a concept has a lot going for it. It would allow newspaper publishers worldwide to put price tags on their premium data online -- say, access to their electronic archive -- and easily permit anyone on the Internet to buy it without having to submit a credit card number.

8. Another article published October 9, 1995 by Keith Dawson in Tasty Bits from the Technology Front (TFTE), states:

Clickshare

Here is an appealing proposal, called Clickshare, from Newshare Corp. of Williamstown, MA (which bills itself as "The Internet's first news broker-age" -- though it seems to me that Clickshare's potential applications extend well beyond news gathering and distribution). I first read about it in *Online Business Today*. Clickshare addresses a number of the outstanding obstacles to online commerce:

- The lack of an economical way to track and bill for small-value transactions across many Net services
- The desire for anonymity in Net-value transactions -- i.e., a virtual equivalent to cash
- Users' disinclination to send credit-card data over the Net
- Users' concerns about divulging personal information to a myriad of suppliers, in order to gain access to the content they offer
- The unwieldy and growing set of authentication/password information that each online user must track as s/he signs up for disparate Net services
- The requirement of advertisers to know, on at least a statistical / demographic basis, who is receiving their messages
- Parents' desire to keep offensive Web content from their children
(<http://www.aria.com/~dawson/tbf/archive/0031.html>)

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registered with one service provider to access services of another service provider; a settling means; a sharing means; and an authentication/verification means.

11. It is therefore respectfully submitted that all pertinent claim elements were clearly shown to have been possessed by applicants prior to Tepier's filing date.

Further Declarant Sayeth Not.

I hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


William P. Densmore, Jr.

June 26, 2003
Date

Clickshare(sm) enters alpha; "test drives" available

Page 1 of 2



clickshare

clickshare service corporation

creating a free market for digital information

CLICKSHARE UNIVERSAL ID PROFILES AND MICRO TRANSACTION SYSTEM ENTERS ALPHA; PERSONALIZED "TEST DRIVES" BEGIN

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What's more, publishers will be able to sell each others' information for as little as a dime per click, managing royalties and commissions seamlessly," added Densmore. "Internet Service Providers will be able to act as on-ramps into this content universe as well."

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http://www.newshare.com/News/alpha_tdr.html

6/23/2003

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Page 2 of 3

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For more news and information, send email to info@newshare.com or see:

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Clickshare "and" Newshare" are registered servicemarks of Newshare Corp.

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6/25/2003



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Tuesday, Mar 04 2003

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Presentations

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Clickshare applauds open market transaction patents as validating technologies based on internet diversity

WILLIAMSTOWN, Mass., March 4, 1998 -- The award of three patents to Open Market Inc. is a welcome development because it tends to confer credibility on a new class of technologies which leverage the Internet's diversity, the president of Clickshare Service Corp. said on Wednesday.

Clickshare is a development-stage, privately funded technology company which owns rights to an Internet distributed user-management system. The patent-pending system enables micropayments and other services. The full statement by the company's president and co-founder, William P. Densmore Jr., appears below.

"The award on March 3 of the last of three patents to Open Market Inc. is a welcome development because it tends to confer credibility on a whole class of transaction technologies -- those which leverage the distributed diversity of the Internet rather than try to close it.

"Corporate technology managers and publishers are confused by the claims and features of different vendors. The U.S. Patent and Trademark Office examiners, while themselves overwhelmed with filings, are nonetheless a corps of unbiased technical analysts whose only goal is to recognize novel and useful inventions. This helps the marketplace to separate valid products from vaporware and potential standard-bearers from position seekers. In the Internet environment, this may be more valuable to the patent holder than license fees or royalties.

"The Open Market patents, at first blush, do not appear to be so broad as to foreclose other approaches to Internet commerce. Rather, they signal that in the Wild West environment of the Internet, good ideas don't all come from large corporations.

"Clickshare's Token Validation Service (TVS), engineered in 1994 and 1995 and subject of a pending patent application, is a compatible and collaborative technology which enables information micropayments, personalization, resource access control and audience measurement. It vests a user with a Digital Calling Card (SM) which can be used for one ID, one password access to multiple web sites. It allows consumers to have credit, but remain anonymous, and respects privacy by requiring no central names database.

"Most important, TVS allows affiliated publishers and consumer billing agents such as ISPs, banks, telcos and retailers to make money -- by exchanging users and links just as wholesalers and retailers help each other execute physical commerce."

-- 30 --

Editor's Note: Open Market's news release may found at:
<http://www.openmarket.com/releases/3patents.htm>

Clickshare Service Corp.'s home page is at:
<http://www.clickshare.com/>

SOURCE: Clickshare Service Corp., 477 Congress Street, Portland ME 04101.
CONTACT: Bill Densmore, (413) 458-8001 / corp@clickshare.com

Clickshare Service Corp.

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Clickshare seeks partners for patent-pending micropayments and user-management technology

WILLIAMSTOWN, Mass., Oct. 13, 1998 -- Clickshare Service Corp. is seeking strategic allies, equity investors and licensees to assist in the commercialization of its patent-pending Internet subscription, microbilling and distributed user-management system.

"We are aggressively seeking partnerships with one or more technology companies, publishers and audience owners such as banks and ISPs to move the Clickshare technology rapidly into the marketplace," said Bill Densmore, president and co-founder of Clickshare.

A six-month prototype demonstration of the Token Validation Service technology involved nearly 2,000 users. Marketed as the Clickshare Service, TVS was tested with three publishers: The American Reporter, Studio Briefing and The Christian Science Monitor.

Clickshare is now seeking a patent for TVS. "We believe the service constitutes a novel application of technology to the problem of how to make the Internet commercially viable," said Densmore.

So far, consumer web publishers have tried to become profitable on advertising alone. Increasingly, they are viewing micropayments and personalized information delivery as essential to boosting revenues -- but few sites have actually ramped up such services.

"We regard TVS as a vital service -- because it offers an infrastructure for tagging and identifying Internet users for a variety of purposes -- as required for Internet information commerce to become mainstream," said Densmore. "There are many publishers and equity partners who have looked at what we have and may want to play a role in bringing it to market."

Parties interested in trialing or licensing the TVS technology should contact Clickshare Service Corp. [413-458-8001 or corp@clickshare.com] to obtain an information packet and arrange for a demonstration.

About the Clickshare Service (TVS)

Clickshare is a client-server based, distributed user-management system for Internet commerce. It enables aggregation of content subscriptions, micropayments, audience measurement by identified user, personalization using a "reverse cookie" approach and Web-site access control. Clickshare employs "Digital Calling Card (SM)" technology which allows users to view and purchase information at multiple, independent web sites using a single ID and password. It enables sale of information "by the click" down to 10 cents per item. TVS requires no special end-user software. More information about TVS may be found at: <http://www.clickshare.com/>. "Clickshare" is a registered servicemark of

Clickshare Service Corp.

About Clickshare Service Corp.

Clickshare Service Corp. [www.clickshare.com], was formed in 1997 to acquire technology developed by two affiliated companies, Newshare Corp. and Clickshare Corp. The company is researching ways for publishers to enter the next century by profitably sharing users and information. The TVS/Clickshare technology is the first spinoff of its efforts. Clickshare Service Corp. is privately held and funded and has strategic relationships with Massachusetts Ventures Inc., the Applied Computing Systems Institute of Massachusetts Inc., and the University of Massachusetts Isenberg School of Management.

Clickshare Service Corp.

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CLICK 201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Oliver, et al.

Serial No.: 09/036,236

Filed: March 6, 1998

For: SYSTEM FOR MANAGEMENT OF TRANSACTIONS ON NETWORKS

Examiner: F. Thompson, Jr.

Art Unit: 2765

December 22, 2002

Hon. Commissioner of Patents and
Trademarks
Washington, DC 20231

Dear Sir:

DECLARATION

I, William P. Densmore Jr., do hereby declare:

1. I am a named inventor of the above patent application.
2. I submit this declaration in support of a demonstration of a prima facie entitlement to priority of invention with respect to Teper, US 5,815,665, the claims of which have been copied in the present application.
3. Attached is a memo drafted in 1995 by David Oliver, one of the named inventors herein, which was contemporaneously transmitted during 1995 and thereafter to a number of independent third parties, subject to non-disclosure agreement.
4. This memo clearly demonstrates that present applicants were in possession of the invention claimed in US 5,815,665 before the filing date thereof.

WPDZ

Further Declarant Sayeth Not.

I hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

William P. Densmore Jr.Date

File: c:\ftp\12-31-02.ark\122002.WD.doc



CONFIDENTIAL PROPRIETARY INFORMATION
UNAUTHORIZED DISCLOSURE PROHIBITED

TECHNICAL CONCEPT
AND OPERATIONS

The Newshare Token Validation System (TVS)

By David M. Oliver
Managing Director-Technology
(dave@newshare.com)

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The need for TVS

It is widely acknowledged that high quality Internet information content can not remain free forever. The Internet needs to offer an economic incentive to information authors if it is to be successful as an open-system alternative to the proprietary services.

Newshare has developed a model for placing value on content items, making sure that only "billable customers" use this valued content, and assuring that the value finds its way back to the content "owner". The short description below does not dwell on the billing "back end" of this model, which can be handed off to a transaction-billing facility with is standard to telecommunications, banking and credit-card processing. Rather, we focus on our method of handling paying customers when they show up on the doorstep of a Newshare Publishing Member something that, until Newshare, has been largely "unsolved" in the Internet's distributed-service environment.

Describing the problem

Some forms of information content have easy-to-acknowledge value to any and every reader -- stock quotations, for example -- and it is therefore easy to develop a stable pricing structure for these services. Also, such services are often operated by a "single shop" so it is easy to develop a connection model of service into that one shop.

However, a large amount of time-sensitive information ("news") is not so simply structured. A large fraction of this content has very high value to a relatively small audience and a low value the rest of the world. Which content has value (and when) is a shifting target. Further, time-sensitive content is distributed around many autonomous providers ("many shops") -- most of whom are vigorously independent.

The current models of presentation, billing and value structuring in the on-line service industry do not align well with the demands of the time-sensitive information business.

- All content providers who want to take advantage of the on-line service must move their content to computers hosted by the service.

- Each service has specific and established information presentation techniques that need to be adhered to.

-- The matter of compensation for use of content is negotiated between content provider and service, not with the users themselves.

-- It is the service that maintains the relationship with the user, not the content provider.

Users of the proprietary-network online services (Prodigy, AOL, CompuServe, etc.) enjoy the convenience of a single bill for an array of information resources. On the Internet, will users have to maintain tens, hundreds or potentially thousands of relationships with content providers simply to get the news they want?

For the Internet is to replace proprietary networks as a standardized medium for value-assigned information exchange, a facility must exist to enable a similar "one bill" consumer relationship -- without the adoption of proprietary encryption, non-standard software browsers or exclusive E-cash efforts. This is the technical "solution" is offered by Newshare's TVS.

The Newshare solution

The costs and benefits of on-line services and the Internet suggest a model that respects both the user and the content provider. Such a model would give the content provider independence and a direct relationship with customers, but somehow allow such providers to cooperate on matters of billing and value sharing.

Newshare is implementing such a model using software that allows for the distributed validation of customers as well as presentation of preference information at validation time. A key feature of this software is that the user needs to validate himself only once at the start of a "session". For then on, his "credentials" are presented automatically when he requests information from any provider in the Newshare universe. The advantage, of course, is that this allows "seemless" access to the universe of content providers within Newshare without the constant need to present identification. In the Newshare model, each customer maintains an account relationship with only one Newshare content provider, even though access is "global". This simplifies the relationship for the user, while still making knowledge about the user available throughout the system.

No modification to browser software

We call this software the Token Validation System (TVS) because it is based on a validation-token scheme. This scheme is implemented within the framework of the definition of the Hypertext Markup Language (HTML) standard used on the Internet's World Wide Web. It is implemented in such a way that current HTML client programs, such as NCSA Mosaic, do not require modification. The implementation is all "server side", so that the only software component modified is the HyperText Transfer Protocol (HTTP) server program which is used by Newshare content providers (called "Publishing Members" or PMs).

Newshare's primary business is to enable local content transfer for value on a charge-per-page basis. While TVS is an important component of our business concept, our server software is really just a vehicle

to make the broader concept happen in a way that benefits everyone. Newshare does not seek to lock customers into specific server features and then ramp up the cost of that software. TVS, and the modifications to the HTTP server, are enabling tools which will be provided at nominal cost as part of a larger system of Newshare Publishing Membership or Technical Membership. This philosophy distinguishes Newshare from browser vendors selling only server software who are attempting to lock up market segments with features that force customers into a single vendor. TVS is being implemented on a free server platform in a manner that makes it easy to port to other servers if/when required.

Newshare servers provide "validation"

TVS is implemented in manner that is rather canonical in the open network environment. TVS is a service provided by a set of TVS server machines operated by Newshare Corporation. The HTTP server programs running on hardware provided by the Publishing Members contact the TVS servers for user validation support.

Here is the general notion of a user session: John decides to read the news after work. He opens a session with his "home" Publishing Member using World Wide Web software of his own selection (and internet service support of his selection, too). He opens this session by requesting his own "homepage" at the PM's Web site. This causes the PM's HTTP server to request an authentication. Either clear password, or S-key or other software can be used here to obtain an authentication -- this part is independent of TVS.

Once an authentication is obtained, the PM's HTTP server contacts a Newshare TVS server to obtain a fresh validation token for John (specifically, for this session by John). Then the server returns to John his "homepage". However, in the process of returning the page, all the Uniform Resource Locators (URLs) -- linking this page to other information at the PM's site or anywhere within the Newshare universe - are "tagged" with the special TVS token. Thus, when John selects any URL to obtain more information, the token is presented along with the specific information request. The HTTP server that John subsequently contacts now uses TVS to make sure the data token presented from John is valid. To do so, the HTTP server sends a "request validation" packet containing the data token to a Newshare TVS server. TVS returns either a failure packet, or a success packet which contains an identification of our user John and some information about his preferences (also usage restrictions and approvals). The HTTP server is then free to serve the request (return to him the information he requested).

The HTTP server contacted then logs his request both locally and over the network to Newshare with the information contained in the token and in the request.

It is Newshare's intention to maintain redundant authorization servers in strategic locations around the Internet backbone to speed the validation process and provide fault tolerance.

Token process invisible to user

An important point, of course, is that World Wide Web client software "hides" the URL from user view -- coding it into the page in the canonical HTML manner. John never sees the TVS token, and never sees the background process of validation that occurs at every information request.

Non-Newshare resources not blocked

Another point is that URLs "outside" the Newshare universe are not tagged with the Newshare TVS token. Thus, a PM can feel free to link to any content on any HTTP server -- whether free or chargeable by some other method besides TVS -- without fear of having the request misunderstood or blocked.

Time limit on "token" validity

By the way, what's a session (many of you know that the World Wide Web is not session-oriented at all)? TVS puts a time limit of the validity of all tokens it hands out. This time limit is variable and designated by the HTTP server when it requests a new TVS token. However, the session is, in fact, time based -- the length determined by the time limit. So, it is possible that during a very long session, the user's token will "time out". In this case, the user is simply directed back to his "homepage PM" for re-authentication. However, it is possible to then regenerate the information request that was inhibited by the timeout, in a manner that causes a minimal interruption of use.

Why TVS is best

What distinguishes TVS from other schemes intended for transaction authentication?

1. Simple implementation, invisible to user. TVS is "lightweight" and out of the customer's view. The customer "truly authenticates" himself only once for each session - typically when he first requests his "homepage" from his "home" Publishing Member. Several client-independent methods of authentication are now available to assure that this process is valid. The TVS software comes into play only after such an assurance is obtained. TVS provides a way for this true authentication to be provided elsewhere within the Newshare universe without constant "re-assurance" directly from the user. Newshare feels that only such a "lightweight" model fits in the time-sensitive information business where content length, value, and timeliness vary so dramatically from provider-to-provider and user-to-user.

2. Not a vehicle for so-called "secure (E-cash) transactions". Newshare fully recognizes the need for such services within the Internet to provide reliable "purchase-oriented" functions, and in fact, TVS does not inhibit such transactions from taking place. Nor does it "invalidate" transaction assurance software (at least none of the variety we have seen). TVS addresses the need to have "known customers" viewing copyrighted, valued information content and services. It does so in a manner that enables "browsing" for such content and services, not restricting it (it is widely cited that when users are asked to validate and monitor the cost of very tiny information transactions, they simply limit or curtail their browsing).

3. Enables transfer of user preferences. TVS is as much about user service as about user validation. This is because TVS transfers information about customer content-viewing preferences among all Newshare Publishing Members. This allows one of the benefits of a direct customer relationship (knowledge of user preferences) to be shared in a manner that benefits both customer and provider equally. Currently discussed secure-transaction does not address this requirement at all.

4. Scalability based on existing protocols. TVS is designed to be very "scalable" as the demand for token validation increases (either through growth in the number of Publishing Members or growth in the number of users). TVS is based on a distributed service concept similar to Internet "name service". However, no single "master" token server will exist -- service is distributed among a set of peer servers who may cooperate to provide their service.

5. Third-party validation and tracking. TVS does share a common feature with distributed privacy software in that TVS is a service provided by a "neutral third party". This has the direct benefit of allowing each Publishing Member to have a single reliable partner in validating users. More importantly, probably, the third party is necessary in the process of "settling accounts" among Publishing Members. This is necessary because Newshare's content valuation model allows for compensation to both the provider of information and to the Publishing Member who "forwarded" the customer to the content provider's door. In addition, this third party model provides an ideal avenue for obtaining "market research" type information about Newshare usage for advertisers.

6. Privacy option built in. While tracking is of interest to advertisers, it is of equal concern to some users who are concerned about their privacy. Already built into TVS is the ability for the user or Publishing Member to "turn off" this type of data generation when requests are made. We feel this "user choice" model responds directly to the current-term negativism toward "background data sharing" on the part of manufacturers and service providers.

Technical Limitations

Working completely within the framework on current standards is a part of Newshare's strong commitment to an open environment for both content providers and users. However, it restricts the avenues of opportunity in some regards and provides technical hurdles in others.

Specifically, it is not currently possible to guarantee the identity of the sending host when a TCP/IP connection is initiated (the HTTP protocol resides atop TCP/IP in the network protocol stack). Though attempts are now underway to rectify this situation, TVS in its early releases will have to recognize that this situation exists and allow only one valid token per IP host address. That is, only one active session can originate from a given IP address (each machine connected to the Internet has one address per network interface, excluding multicast addresses and broadcasts). Newshare will closely monitor the industry's efforts to provide additional security in identifying network-layer connection issues. Secondly, Newshare URLs that are saved on "hotlists" or other "memory" devices (e.g., personal

databases) will inevitably become "stale" if they contain a TVS token. Therefore, when a user attempts to link to an old URL, the user will have to be "re-validated" (because the token attached to the URL is currently invalid). There are several avenues to address this limit, some requiring changes (or actually "enhancements") to the Web client software. Newshare is also looking at enhancements to TVS itself that recognize and correct this early-stage deficiency. This is an operational issue which does not alone merit a redesign of Web client software. Moreover, it is increasingly common for Internet users to "cache" their browsing preferences to a server-based home page rather than a local set of hotlinks. When this is done, the TVS server software will "refresh" those links with a new token at each session.

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multinational corporation and before Josh became the dictator of a small Eastern European nation -- we considered using a micropayment business model.

We reasoned that if each of our millions of readers were willing to plunk down a nickel for every article they read, we'd have the biggest bellies in Fat City. Hell, if a mere 100,000 people a day came through our site (remember, there are supposedly 15 million active Internet users), we'd be making \$25,000 per week. And even if we could live on that (though Josh would have to give up his three-hour-per-day habit). So when Clickshare announced last week that micropayments were finally a reality, we asked where to sign.

None of the financial mechanisms that people are coming up with are trying to capture people rather than entice them," Clickshare marketing director Felix Kramer says with postmodern verve. Clickshare, which has raised \$175.85 since last Friday, "utilizes the interconnectedness of the Web."

Here's how: Netly Publishing would enter into a deal with Clickshare and install its software on our servers. Next we would tell all of our readers that we were going to start charging them \$.10 and up for each article they read on Netly. Clickshare then tracks readers' usage and supplies a record of their "page visits," including session IDs and time stamps, and submits a bill based on that usage from Netly Publishing. Clickshare keeps 20 percent of the tab, 30 percent is kicked back to the company that bills the users and provides the connectivity, and the other half goes back into the Netly coffers (note that if Netly acts as the bill collector/ service provider, a full 70 percent of the total bill goes into our pockets). All the user sees is an aggregate bill at the end of the month.

"I think this is a way that writers can finally end up getting paid for their writing," said Kramer. It's the dawn of a new age -- none too soon if you ask us.

Right now the most lucrative aspect of the Clickshare system is its ability to gather detailed user demographics. Beyond that, Kramer admits that "we're not sure about these models we're implementing. It may change once we gain more experience."

The whole venture depends on Clickshare's ability to achieve step one -- luring The Netly News Networks Publishing Ventures SA and other content providers into using its system. Clickshare essentially has to become a network to become viable. In truth, if you can become the network, you've got it made anyhow. We're not sure that Clickshare is really ready to go head-to-head with Microsoft, but Kramer assures us that he "expects to be talking to a lot of Fortune 500 companies" once Clickshare finds a CEO.

Of course, the operation also depends on the readers' willingness to shell out for the articles they read. To that end, Team Netly has put together a special Consumer Report on navigating the Web with Clickshare. We sent our seasoned subjective site appraiser, Steve Baldwin, and after much deliberation, he arrived at a definitive judgment of how much these popular web pages are actually worth -- and why.

But Clickshare couldn't resist including the story's sidebar, but think it's only appropriate that you go to the original story to get the links for the items below -- and that way you can appreciate the original design 100.%

Netly Directory Services (\$0.30 per click): Being able to stalk your former co-workers and significant others may be worth something.

USA Today's Lotto Results (\$0.18 per click): You didn't win again, loser! (there -- I've just saved you \$0.18).

Quake Cheat Pages (\$0.75 per click): Look, you've already spent \$49 on this game -- spend a few more cents to get through the damned thing.

Internet Underground (\$0.08 per click): The going rate for deep-thinking repurposed journalism (we might shell

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...a quarter for the whole site.)

Playboy (\$0.50 per click): Excellent editorial content.

The Chao/Calender (\$0.15 per click): She's added two performing elephants to her act. Wouldn't you pay \$0.15 to know this?

Search Voyeur (\$0.45 per click): Horrifyingly funny. We could watch this for hours and rack up a big bill.

Leaving Your Lover by Sign (\$1.00 per click): Worth at least a buck if it works.

Any Search Engine (\$0.00 per click): Never in a million years would we pay for searching. If these greedy vendors start charging, tell them you're going back to the World Wide Web Worm.

The Netly News (\$1.75 per click): Cutting-edge web journalism (besides, we need to raise funds for Stumper's top-way bus ticket to Comdex.)

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Clickshare Culls Microrevenues: Surfers able to buy content with mini-payments

Excerpts from an article by John Evan Frook in the September 17, 1996 online issue of *Interactive Age*, published by CMP. Here's where the original of this article can be found:

Fifty-two dollars and sixty cents might not seem like a lot of cash, but to the folks at Clickshare Corp. it is history in the bank.

That microscopic amount -- not enough to buy dinner for four at a posh restaurant -- is the money collected over the weekend by Clickshare's just-launched Internet micropayment system, which enables people to buy individual articles over the Internet for as little as 10, 25 or 50 cents.

Only about a dozen registered buyers conducted online purchases between Friday and Sunday, but Clickshare says that's not the point. It claims the launch of its system marks the first time a technology has been implemented to allow publishers to charge for information on the Internet, as opposed to giving it away gratis.

The launch of Clickshare makes good on a promise. The company announced its plans to introduce a publisher's commerce tool more than a year ago. It has steadily advanced its strategy by developing the technology behind a multi-site payment system...

Williamstown, Mass.-based Internet start-up, Clickshare beats to the punch no less than IBM, which is selling its similar Cryptolope technology as the gateway to for-pay information. But it might face an uphill climb in continued competition with Big Blue. Though Cryptolopes are just coming out of the test phase, IBM's market unit claims it has as many as 40 contracts with publishers to use its technology to sell articles over the Net.

Of course, both Clickshare and Cryptolopes also face an unknown element -- whether consumers will be willing to pay for information delivered over the Net.

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Is Web a field of dreams?

Excerpts from an article by Janet Kornblum published September 16, 1996 in C|Net's online News Com. Here's where the original of this article *may* still be found.

Clickshare today launched a service that may help answer the most burning questions for Web publishers: If you build it, will they come? And perhaps more important, will they pay for it?

Clickshare has a technology that can charge consumers every time they call up information on the Web. Users enter their credit cards with Clickshare, log on, and then can pay for news on a "click-as-you-go" basis...

But it's unclear whether people will pay for information on the Web when they can find it in other ways for free. See Mark Loncar, a partner for marketing technologies with CKS Partners...

Bill Densmore, Clickshare's chairman, summed up his company's strategy this way: "We're the Web's first working micropayment service. Now, publishers can charge for valuable information on the Internet, rather than giving it away."

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Digital News: Ripping Into Newspapers

Excerpts from an article by Reid Goldsborough in the September, 1996 issue of NetGuide. The original of this article can be found by an archival search for Clickshare.

Another option being explored by online publishers is pay-per-click services. With Clickshare, the monitoring system that facilitates such pay-as-you-go services, sites can set rates as low as 10 cents per page. Even if an online publisher doesn't charge for a hit, it could use Clickshare to track usage and provide this information to advertisers, says Bill Densmore.

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Micropayment Venture Pushes Centralized Billing

Excerpts from an article by Bill Roberts in the June 17, 1996 issue of WebWeek. Here's where the original of this article can be found.

Look ahead six months. Dozens of Web sites are charging subscription fees, and more are joining them every day. Pay-per-view emerges as the standard way to subsidize content, and surfers pay every time they hit the site.

Now consider this: Would this reality be more palatable if the audience could pay a central billing entity instead of getting a bill from a dozen different marketers?...

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Steve Outing, an Internet publishing consultant and president of Planetary News in Boulder, Colo., said, "Clickshare raises the bar and gives newspapers a lot more options about how to bring in new revenue. Until now the best you could do was a subscription model." ...

Bob Harvey, vice chairman of Next Century Media Inc., a Sausalito, Calif.-based interactive media consulting, measurement and tracking firm, added that "Clickshare starts with the philosophy that you can get some money from the consumer as long as you keep the price per page quite low, 10 cents or a quarter. You have to have a three-legged stool to make money--online shopping, ads and consumer subscriptions. Clickshare seems to understand this better than anyone else. I think they're going to succeed, but it has to be tested." ...

The Monitor expects to test a pay-per-piece model for its voluminous archive, said David Creagh, the Monitor's electronic publishing manager. "We adopted it because we think they have the most sophisticated technology we've seen for raw audience data--who goes where for what," he said. "We're going to need that but don't know how we'll use it." ...

Jonathan Roosevelt, an associate at Baitery Ventures in Boston who specializes in Internet ventures, finds the Clickshare model intriguing. "They have a fantastic technology. It really is sophisticated, neat stuff. I'm not sure they're applying it in the best way," he said. ...

But with all the free content, do Web users want to pay at all? Consultant Outing isn't sure. "The difficult part for magazine publishers and newspapers is figuring out what people are willing to pay even for a few pages," he said. "As people see more of that, it will become more accepted, but initially that will be tough going. Paying for archive access is a no-brainer." ...

Creagh believes people will pay. Earlier this year the Monitor put up a Brania site. When Creagh later asked 250 site visitors if and how they'd be willing to pay, more than half were game for a micropayment system like Clickshare.

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Who's doing all this measuring?

Excerpts from an article by Jamie Murphy and Ed Forrest in the May 26, 1996 issue of The New York Times (over Times daily. Here's where the original of this article can be found if you're a registered subscriber).

A number of companies now are trying to bring some calm to the seeming madness of measuring traffic on World Wide Web sites -- and on the banner's advertisers pay to place on those sites -- though each has its own view of how and what to measure.

devising more accurate and efficient methods of a Web site's popularity among Internet users is a battle that's now beginning...

Once a user is registered with Clickshare, for example, he or she can surf from Clickshare site to Clickshare site without having to re-register at each stop. Clickshare registrants can also use their account with the company to see what they owe on any Web purchase.

Currently, the Christian Science Monitor, American Reporter, and Studio Briefing use the Clickshare system.

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Pay-Per-Click: The Next Great Online Revenue Stream?

Excerpts from an article by Steve Guting in the May 8-9, 1996 online issue of Stop the Presses!, the Newspaper Law Media News & Analysis column hosted by Editor and Publisher. Here's where the original of this article can be found.

In recent conference presentations, I've been telling my audiences that the model that makes the most sense for newspapers operating on the Internet right now is to give as much away free as possible, and concentrate on attracting advertisers because they will carry most of the weight in supporting newspaper Web operations in the future. Donmore's pay-per-click strategy actually fits in well with this advice. In that pay-per-click allows a publisher to charge potentially small amounts (microtransactions) for premium content that is worth paying for from the consumer perspective.

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How Java Can Pay the Rent

Excerpts from an article by Robert Hummel on page 42 of the June, 1996 issue of Byte magazine. (This article is not yet online).

John Kramer, marketing director at Clickshare (Williamstown, MA), another company that's exploring the field of electronic commerce, sees this as one of the functions of the Web distributor: "People are going to deposit their applets at payware sites on the Web," he explains. "Other people will collect the fees for them and send them a monthly check."

Kramer envisions a billing model for applet use based on data transferred, not on time used. Each download of an applet might cost a few cents or dollars but would allow the use of an applet during an entire session. The alternative, in which the applet might be equipped with a built-in expiration timer, interrupting your application to demand another nickel, is not as likely to occur. "The Internet is a stateless system," Kramer says. "Time as a method of measurement will go away."

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Monitor Monitored by Clickshare

Excerpts from an article by John Evan Froom in the May 7, 1996 online issue of Interactive Age, published by CNET. Here's where the original of this article can be found.

The Christian Science Monitor plans to include 15 years of newspaper archives at its soon-to-debut Web site. The venerable paper also announced it has picked Clickshare Corp. to provide traffic measurement and microtransaction strategies for the site. The Monitor's endorsement is a major boost for Clickshare, which has been one of the least hyped of the Web traffic measurement companies to date.

Monitor electronic publishing manager Dave Creagh said Clickshare will be used to measure repeat visitors to the site. He said the determining factor in selecting Clickshare was the firm's ability to track unique users.

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without requiring on-site registration and password access.

Clickshare's technology to track visitors, including time spent per visit, is the most sophisticated we've seen," said Creagh. He added that Clickshare's willingness to work with third-party auditors, such as NetCount and Who, also factored in the decision. "We feel that Clickshare will soon set the standard for allowing transaction-based pricing on the Internet."

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Christian Science Monitor To Launch Web Site, E-Mail Service

Excerpts from an article by Laurie Peterson in the May 6, 1996 online issue of Media Daily: Internet Information, published by Cowles/SIMBA. Here's where the original of this article can be found.

The Christian Science Monitor will unveil a new Web site in two weeks that features a 15-year searchable archive, 24-hour real time audio newscasts from Monitor radio and a crossword puzzle with two levels of difficulty -- one of which lets you cheat a little.

The Electronic Edition of The Christian Science Monitor at <http://www.csmonitor.com> will be free to users through the summer, according to Dave Creagh, electronic publishing manager. Some areas will require registration. Two pricing models will be tested this fall -- a monthly subscription rate of about \$6 for unlimited access and a transaction-based plan that would charge, say, 10 cents to view a political cartoon. ...

The Web site will employ Clickshare Access and Payment Service software to track usage. The software gives users a "digital calling card" so they can log in once and charge purchases at many Web sites to a single account. It also tracks visits to advertiser-supported pages.

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Clickshare eyes web, sees possible profit in pay-to-use browsing

Excerpts from an article by Pam Derringer in the April 8-9, 1996 issue of Mass High Tech, New England's High Technology newspaper. Here's where the original of this article can be found.

A Massachusetts-based "virtual company" with a handful of employees scattered across the country is betting on the practice of paying for information on the Web will become as accepted as the once-preposterous notion of paying to watch TV....

Clickshare's future is bright, despite the rise of companies such as Open Market in Cambridge that are also vying to form business networks. But Open Market collects user/payer information and stores it in one location, Densmore said. Unlike Open Market, Clickshare's user data will be decentralized among the network's affiliated publishers, with each user giving information to a publisher they trust rather than to a large centralized database with which they have no contact, he said.

Densmore is unfazed by prospective rivals.

"The numbers are so huge now that nobody is competing with anybody," Densmore said. "There is enough

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business for everybody at this stage."

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Web publishing: is fortune really just a click away?

Excerpts from an article by Cynthia Karkowski in the April 16, 1996 issue of Webster -- The Cyberspace Surfer online newsletter. Here's where the original of this article can be found (if you're a registered subscriber).

The ability to support microtransactions -- purchases under a dollar -- across the Internet promises to drive the sale of information on the World Wide Web. Publishers and authors will be able to sell their works by the article or chapter, or quotable text for that matter. Suddenly, publication archives will become a new revenue source -- not just supported by Web advertising banners, but supported by user purchases of information. Ten cents here, a dollar there, it all adds up to big revenue gains. Revenue publishers might otherwise never have generated under the traditional subscription or newsstand model...

One secure microtransaction system developed by Clickshare Corp., is being tested this spring. (See Webster article "Clickshare Begins Trials of Clickshare Access & Payment Service" 04.02.96.) With the exception of the initial user registration which must be conducted offline, the Clickshare Service operates online, verifying users, tracking user purchases and delivering user activity reports to its publishers for billing and collection....

Clickshare provides another model for supporting the sites," said Felix Kramer, president of Kramer Communications and spokesperson for Clickshare. "Sites will get some revenue by casual clickers."

The Unix-based Clickshare Service is in its initial phase of testing by publishers Studio Briefing and American Reporter. Both publishers are looking for a secure payment system which allows them to sell their wares for under a dollar while still supporting high-priced purchases. Clickshare's flexible pricing model attracted the online daily American Reporter. The American Reporter is marketing duties in two formats: an all-in-one newsstand price and per-article rate ranging from \$1 to \$30. The Clickshare system can deal with the complexities of such a variable pricing structure with its unlimited pricing levels.

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But will the model catch on? It may all come down to pricing.

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Self-Publishing Opportunities on the Internet

Newshare: a new opportunity for nonfiction writers

Excerpts from an article by Durant Imboden, author of the "Putting the Net to Work" column in the April 1996 issue of Boardwatch magazine. Here's where the original of this article can be found.

News reporters are another group of writers who hope to make money on the Web. Newshare Corporation is an online syndicate that expects to help freelancers and publishers earn revenues from worldwide dissemination of their work.

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"We gather the work of content providers like newspapers, broadcasters and independent writers and artists," the company explains in its recruiting pitch. "Then we make it possible for each of these providers to share their content with their own customers: subscribers and users all under a single system of validation, tracking and payment."

Right now, Newshare's content is being offered free of charge, so it's impossible to guess how successful the concept will be when billing starts in mid-1996. To draw your own conclusions, and to see what kinds of content providers the "Clickshare" service attracts, keep an eye on <http://www.newshare.com>.

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Clickshare adopts pay-as-you-surf plan

Excerpts from an article by Jim Kerstetter appearing in the March 25, 1996 PC Week, published by Ziff-Davis. This article is no longer online.

Clickshare Corp. has developed software that gives World-Wide Web site publishers a way to charge users based on their activity.

The Williamstown, Mass., startup's Access and Payment Service uses a "digital calling card" process in which users establish a line of credit with the site simply by phoning the publisher. Clickshare's Web server authentication is then initiated when a user re-enters a site.

The system keeps track of a user's activity on the site, with each page having its own price. The lowest per-hit cost that Clickshare can afford is about 10 cents, company officials said.

Some users, although pleased by the technology, said they hope the base fee will drop.

"I think the system should be flexible enough to charge pennies," said Joe Shea, editor in chief of the Internet magazine American Reporter, in Hollywood, Calif. Shea is one of two users currently testing Clickshare's Access and Payment Service software.

Clickshare's Access and Payment Service is now available for Digital Equipment Corp.'s Alpha servers running Unix and Intel Corp.-based machines running Unix. Other platforms will follow this year, officials said.

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Clickshare collects for online pubs

Excerpts from an article by Rose Aguilar published March 18, 1996 in C|Net News. Here's where the original article *may* still be found.

Technology trials have started for a new Internet payment system from Clickshare that will make it easier to pay for online subscriptions.

Called the Clickshare Access and Payment Service, the technology lets users bill charges from several online content publishers to a single billing account.

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users, the attraction is that they won't have to use their credit cards for small transactions, nor will they have to give their credit card numbers to multiple vendors to sign up for multiple online publications...

The catch is that the publisher must also have signed up for the Clickshare service. But the company hopes that publishers will be attracted to the service because it will make it easier to track customer billing, count the number of times a user views a given site, and monitor visits to advertiser-supported pages.

Two publishers are participating in the tests: Studio Briefing, a daily entertainment industry newsletter, and American Reporter, an online news daily.

The registration at Clickshare provides users with a single ID and password account and a list of publishers using the service. The system also supports authentication for intranets, officials said.

Clickshare is a privately held spin-off of Newshare Corp.

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Clickshare Internet Publishing Scheme Looks Promising

Excerpts from an article published September 18, 1995 in *Stop The Presses*, published five-days a week by Dave Quigg, Planetary News LLC, and owner of the online-news and online-newspaper mailing lists. The column, found at [STP archive](#), is sponsored by *Editor & Publisher* magazine. Here's where the original of this article may still be found.

The Clickshare system monitors and collects data on where the consumer has visited and purchased information; then sends the data back to the home publisher and the remote publisher. The remote publisher receives his share of the sale, the local publisher keeps a slice in compensation for the referral, and Newshare takes a portion. And the participating publishers receive a detailed accounting of what consumers are reading, which can serve to provide advertisers with a verified account of online viewership.

The Clickshare concept has some wise thinking behind it. President Bill Densmore, a former newspaper publisher, has designed Clickshare as an open system supporting Internet standards. Consumers can use Clickshare with any Web browser software. It makes purchasing data on the Web simple; the consumer gets only one bill no matter where in the world she has purchased information. And a single password works everywhere. Credit card information is not transmitted over the Internet; rather, that data is kept solely by the local publisher. Consumers are kept track of by an alphanumeric ID number that is discernable only by the local publisher.

Clickshare as a concept has a lot going for it. It would allow newspaper publishers worldwide to put price tags on their premium data online -- say, access to their electronic archive -- and easily permit anyone on the Internet to buy it without having to submit a credit card number.

The idealistic vision of Internet publishing commerce is predicated, of course, on Newshare signing up a critical mass of publishers to be part of the Clickshare network. That's going to be its biggest challenge, especially since Newshare is a small company without a proven track record. I, for one, wish them luck.

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<http://www.lightning.com/clickshare/pubpack/clickclips.html>

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Newshare Enters Pay-As-You-Click Market

Excerpts from an article by Jeremy Carl published in Oct. 1995 in *Web Week*, published by Mecklermedia. This article is no longer online at the site; current issues are found at *Web Week*.

Waltham, MA-based Newshare has begun alpha-testing its new Clickshare pay-per-click system, which is scheduled to debut as a full-fledged service in early 1996.

Other subscription-based programs have appeared on the market in recent months, but Newshare is positioning its product as differing from its competition in terms of its pricing structure. The company will go after low-end subscriptions by enabling individual providers to charge as little as 10 cents per page and up, making transactions that would be impossible or worthless with a credit card economically feasible. Revenues from such sales will be divided among the publisher of the content (royalty), the referring publisher (referral commission), and Newshare, which will take a percentage as a transaction fee (tentatively set at 15 percent).

Newshare President Bill Densmore explained a hypothetical transaction with his system. "Let's say you click on a link from a story about the Boston Red Sox in the San Jose Mercury News. The link takes you to the Boston Globe's Web site, where another story is. Using Clickshare, the San Jose Mercury News, as the referring publisher (the source of the link) would take a certain percentage of the transaction and the Boston Globe (the final publisher of the article) would also take a percentage." For this system to work, both must be running the Newshare software.

While the Web has always offered easy navigation between content on different sites, products such as Clickshare may make the subscription-based model of Web usage a more common phenomenon. "We're creating a platform for publishers to share users and share content without having to surrender their copyright, without losing physical control of their material," said Densmore.

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Clickshare Promises Publishers a Way to Make the Web Pay

Excerpts from an article published October 3, 1995 in *WEBster*, the online biweekly published by Tabor Communications. Here's where the original of this article *may* still be found. For information, see [Webster](#).

Waltham, Mass. -- Publishers can stop banging their heads against the free content wall, maybe. Late last month, Newshare Corp. announced they had developed the excelsior that will allow Web businesses to sell information by the page.

Called Clickshare, the system is run from the publisher's server and requires no special consumer software. It handles third-party usage tracking and allows users to invoke automatic parental control.

Much of the publishing world has held back from participating in the Internet because it lacked a way to charge for information and a way to verify viewership to advertisers," said Bill Densmore, Newshare Corp. president and co-founder. "Clickshare presents a solution to both problems. Clickshare addresses the issue of how to obtain revenue from per-query access to content or databases."

And users can have a single billing relationship with a publisher or Internet service provider yet surf the net freely, purchasing words, sounds or pictures from any Clickshare-enabled site without having to constantly re-

<http://www.nightning.com/clickshare/pubpack/clickclips.html>

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register or recall multiple passwords." Densmore said.

Consumers enter the Clickshare universe by registering with a single, independent publisher (or more if the user desires multiple account relationships). Any publisher with the system might then sell a hypertext "page" of information in response to a user's click for a price of 10 cents or less. A range of higher charges are fully supported, as well, if desired by the publisher. The Clickshare system will then charge the home-base publisher of the remote user the 10 cents and will distribute a portion as a royalty to the selling publisher, a portion as a commission to the referring publisher and will retain a portion as a transaction fee...

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Clickshare

Excerpts from an article published October 9, 1995 by Keith Dawson in his twice weekly column, **Tasty-Bits from the Technology Front (TBTF)**. Here's where the original of this article *may* still be found.

Here is an appealing proposal, called Clickshare, from Newshare Corp. of Williamstown, MA (which bills itself as "The Internet's first news broker- age" -- though it seems to me that Clickshare's potential applications extend well beyond news gathering and distribution). I first read about it in *Online Business Today*. Clickshare addresses a number of the outstanding obstacles to online commerce:

- The lack of an economical way to track and bill for small-value transactions across many Net services
- The desire for anonymity in Net value transactions -- i.e., a virtual equivalent to cash
- Users' disinclination to send credit-card data over the Net
- Users' concerns about divulging personal information to a myriad of suppliers, in order to gain access to the content they offer
- The unwieldy and growing set of authentication/password information that each online user must track as s/he signs up for disparate Net services
- The requirement of advertisers to know, on at least a statistical / demographic basis, who is receiving their messages
- Parents' desire to keep offensive Web content from their children
(<http://www.atria.com/~dawson/tbtf/archive/0031.html>)

The Clickshare system tracks your Web-surfing activities, but anonymously, and accumulates similar data for others throughout the system. This allows advertisers and publishers to access demographic reports of what users are requesting without compromising users' privacy.

Clickshare is not the first proposal of this type but it may be the most comprehensive to date. It combines features of Digicash's ecash (<http://www.digicash.com/ecash/ecash-home.html>), IPro's I/CODE system (<http://www.ipro.com/>), and some of the back-office functions of Open Market (<http://www.openmarket.com/products/ProdDescrTMS.html>). It requires no hardware or software at the user end. And it offers the advantage to the user of entrusting personal information only to one single organization with which s/he can freely choose.

<http://www.nlightning.com/clickshare/pubpack/clickclips.html>

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This is the mirror of a page (<http://www.clickshare.com/pubpack/clickclips.html>) last updated 9 December 1996.

Clickshare(sm) enters alpha, "test drives" available

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**clickshare**

clickshare service corporation

Enabling a free market for digital information

CLICKSHARE UNIVERSAL-ID, PROFILING AND MICRO-TRANSACTION SYSTEM ENTERS ALPHA; PERSONALIZED "TEST DRIVES" BEGIN

WILLIAMSTOWN, Mass., Oct. 23 -- Newshare Corp. begins shipping to selected publishers this week the alpha version of its breakthrough Clickshare(SM) system to track and settle Internet-wide micro-transactions.

Clickshare removes one of the biggest barriers to the evolution of the Internet by giving users universal-ID access to a free market for digital information," said Bill Densmore, Newshare president and cofounder. "Yet user information -- and the user relationship -- remain physically controlled by the publisher."

Clickshare's personal Newshare(sm) topic-profiling and custom-linking facilities are open for public use at <http://www.clickshare.com/tryit.html>. Transaction-handling capabilities, and an initial base of Publishing members, will be launched in early 1996.

At this point, publishers will be able to sell each others' information for as little as a dime per click, managing royalties and commissions seamlessly," added Densmore. "Internet Service Providers will be able to ramp up into this content any time as well."

Clickshare requires no special software for consumers beyond their Web browser and costs a publisher as little as \$9.95 to join. Publishers can sell information by subscription or per query to their own users, and set all pricing. Newshare is now soliciting a broader group of "beta" publishers.

"Publishers thinking toward the next century want to maintain a close relationship with their users," says David Driver, Newshare's managing director, technology and principal Clickshare author. "And this implies knowing them, profiling their interests and preferences, authenticating and verifying their use of resources, and billing them for charged items. Clickshare does this for publishers and for users in background, not in your

WHAT IS CLICKSHARE(sm)?

Clickshare is a complete, distributed, user management system which provides the only true third-party validation of web usage. It differentiates "eyeballs" rather than just counting them. It protects personal privacy and the publisher/subscriber relationship.

Clickshare(SM) permits consumers to access information on multiple, unrelated Internet Web servers with a single ID and password. It gives publishers revenues not only from their own information but from the information their users buy elsewhere. And it gives advertisers the best way to measure web traffic by specific user.

Clickshare's versatile architecture is core technology for a worldwide free market for digital communications -- a true information exchange," said Densmore.

http://www.newshare.com/News/alpha_fatnosed.html

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Clickshare(sm) enters alpha: "test drives" available

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Newshare Corp. is based in Berkshire County, Massachusetts, a region which has spawned several multimedia groups because of its high quality-of-life, accessibility to New York and Boston and good talent pool. Formed in September, 1994, it is privately held.

HOW IT WORKS

Clickshare has two principal components, Oliver says. Clickshare-enabled Web server software runs on publishers' computers as a primary piece of controlling software or as an adjunct to other UNIX-based server software. It logs user registration, authentication, personalization and micro-transactions.

The second piece of essential software, the Clickshare token-validation service (TVS) server, is run by Newshare Corp. or licensees. It creates and validates authentication tokens; brokers non-personal user services among publishers, and maintains "page visit" records from multiple independent sites sortable by anonymous user number, page visited and site ID.

"At no time does Clickshare know a user's name or demographic profile," says Oliver. "Only the user's home Publisher has this information."

Clickshare has been called an example of "wise thinking" (Steve Otinger, Editor & Publisher Interactive, Sept. 18, 1995) and "the excelsior that will allow web businesses to sell information by the page" (WEBster, Oct. 3, 1995).

Each user has a single "home base" at a Publishing-Member (likely to be a local or specialty publication with whom they have a continuing relation). Clickshare users register just once with their home base, providing credit-card information by phone, fax, mail or secure Internet connection. At no time do credit-card numbers or other personal information traverse the Clickshare system.

Afterward, a user begins a Clickshare(sm) session as simply as logging in to the online world in the first place. The user must enter a personal ID and password just once during each session. In response, their home Publishing Member provides them a personalized, updated, jumpoff page of useful links, based on the personal topical-interest profile the user provided at initial registration.

As they browse effortlessly to Clickshare-enabled and other sites, users can be confident that the link between their identity and their tracks does not go beyond their home Publisher. Clickshare provides mechanisms to establish charge limits and receive periodic reports of charges.

The Clickshare-enabled Web Server -- which is browser independent -- is provided to Member Publishers by Newshare Corp. free under license. Newshare's back-end service network exchanges data with the Internet servers of Clickshare-enabled sites, validating users and tracking all discrete page-accesses -- chargeable or free, across every participating site.

Clickshare tracks content served to users regardless of the location of their "home" Publishing Member. Aggregate micro-charges, settled monthly or more frequently, allocating commissions, royalties and transaction fees, thus form the basis of a system resembling an ATM network.

Clickshare leaves to each Publishing Member the marketing contours of its relationship to its customers. Each Publishing Member is thus free to use its own model for user subscription or per-page rates.

A portion of all fees accumulated by a user for all visited Clickshare-enabled sites is retained by the user's home Publishing Member. This is termed a "referral commission." And Newshare retains a portion for its role in marketing and clearing transactions. At least 50 percent of each transaction goes to the content owner as a royalty.

Clickshare(sm) enters alpha, "test drives" available

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MORE THAN IP NUMBERS

Beyond the model of payment for access to information, because it tracks known users (rather than Internet Protocol (IP) numbers), Clickshare may also serve as a third-party circulation/viewership auditing mechanism for the advertising and publishing industry, while leaving to users control of release of demographic and other data, and respecting their desires for privacy.

"This transparent and efficient mechanism makes it economically practical to bill information purchases of as little as a dime and possibly less," says Oliver. "Thus Clickshare provides the platform on which the consumer of the 21st century can freely and conveniently access independently owned information worldwide, paying through existing credit structures."

For more news and information, send email to info@newshare.com or see:
<http://www.clickshare.com/Clickshare/>

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NEWSHARE QUICK LINKS TO:

[NEWSHARE/CLICKSHARE CONCEPT](#) | [VISION 1997](#) | [NEWSHARE/CLICKSHARE NEWS](#) | [NEWS](#) | [TOPICS](#) | [WHAT'S NEW](#) | [HOME PAGE](#) | [LEAVE A COMMENT](#)

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CLICKSHARE SERVICE CORP.
ANALYSIS OF TEPER ET AL. CLAIMS
(v2.0 09-27-99 including citations to Oliver et al.)

Text from Teper et al. is shown in light-face 10-point type in narrow column width.

Annotating comments by Clickshare Service Corp. are shown in italics 10-point type across the full width.

Excerpts from Oliver et al. are shown in lift-face, 12-point type, surrounded by quotations.

IMPORTANT NOTE: Within Oliver, references occur throughout to the "home" Publishing Member of the user. Subsequent to filing of the patent application, a decision was made to standardize the reference to a "home" Publishing Member as a "Clickshare Service Provider." The patent application refers at some points to the Service Provider and at other points to the "home Publishing Member." These terms are interchangeable and are distinct from the generalized mention of a "Publishing Member" – an entity which sells information resources but does not maintain an account relationship with users. The Fig. 1 accompanying the patent application records this duplicate terminology with the reference inside the circle of the "Home" Publishing Member which reads: "Client . . . Home Publishing Member – a/k/a Clickshare Srvc Provider."

1. A method of providing an online service to a user over a public network, the online service provided by a Service Provider (SP) site to a user computer via the public network, the method comprising the steps of:

Oliver also describes a service to users over a public network provided by a Clickshare Service Provider to a user computer via the public network and also by Clickshare Publisher Member(s) to a user computer via the public network.

Oliver at Page 6, Lines 9-13:

"The Clickshare/TVS Service is a distributed user-management service for Internet information micropayments, access control, audience measurement and personalization with one-ID, one-bill user convenience. It is designed to address the problem of how to charge Internet users for their use of resources and control their access to those resources. It is also designed to provide for the transfer of information about users among multiple web sites in order to control access or define service authorization."

Oliver at Page 7, Lines 12-26:

"INFORMATION SELLERS/RESOURCE PROVIDERS -- Operators of World Wide Web sites who wish to make money from the sale of information or software, or wish to control access to resources. These are called Clickshare Publishing Members or Clickshare Resource Providers. Examples include: newspapers, magazines, specialty publications, new-media entrepreneurs, game vendors, software publishers, health-care providers, network or other service providers.

"BILLING AGENTS/SERVICE PROVIDERS -- Consumers have preexisting, ongoing credit relationships with billing agents or service providers who agree to become

Clickshare Service Providers. In exchange for a negotiated share of the "Clickstream" revenue from information sales, or for other consideration, these service providers assume responsibility for servicing and billing consumer or enterprise end users and for authenticating the user at the start of a Clickshare/TVS session. Examples include: Internet Service Providers, newspapers, specialized publishers, online services, telephone companies, cable and utility companies, credit-card issuing banks, health-care providers, retailers, other consumer-credit entities, network or other service providers and other enterprises."

sending a request message from the user computer to the SP site over the public network to request the use of the online service;

Oliver describes the sending of a request message from the user computer to a Publishing Member site (analogous to the "service provider" in Teper) to request a resource from the site.

generating a challenge message at the SP site in response to the request message and sending the challenge message over the public network to the user computer;

Oliver describes the Publishing Member site responding to an HTTP request for service with a request for to the end-user's computer for the user to either "log-in" to that Publishing Member site or provide a hint to the PubMbr site of where to redirect the user for authentication. (See accompanying screen shot, labeled as Exhibit A)

generating a response message in the user computer in response to the challenge message and sending the response message over the public network to the SP site, the response message including or being based upon an identifier of the user;

Oliver describes the end user, in response to the authentication challenge, replying with an identifying user name/password string, or, if the user name/password string has been cached in the web browser, the user computer returns the string automatically.

Oliver Page 48, Lines 2-5:

"To begin, the user points his WWW browser to the home page set up for him at his "home" Publishing Member (step 1). This page has been designated as "authentication required" by the Publishing Member, so the user's browser receives back from the Publishing Member's HTTP server an appropriate status message. The browser prompts the user for his user-name and password, which it then returns to the HTTP server as Request Header information."

sending at least the response message from the SP site to a remote online broker site, the online broker site having a brokering database which contains account information of registered users of an online brokering service of the online broker site;

Oliver describes the sending by a Clickshare Service Provider [otherwise known as "home" Publishing Member] site of an authentication request to the Clickshare Token Validation Service ("online brokering service"), along with user preference information, in order to obtain an encoded, session-based token identifying that user.

Oliver Page 48, Lines 15-25:

"Once the HTTP server has obtained the user's Authentication information and has validated it locally, the HTTP server contacts TVS with a request for a new Authentication Token. In making this request, the HTTP server sends the user's profile to TVS with a request for a new Authentication Token. This profile information (along with other per-user information) is stored in each publisher's registration database.

"7.3 TOKEN GENERATION AND RETURN

"TVS uses information from the user's profile to build the Authentication token. For example, the user's service class information is used to determine what the token's validity period will be. The Authentication Token has an encrypted "payload" and is "uencoded" and "sanitized" to accommodate the Web URL naming syntax where required. The token is "opaque" to both the HTTP server and to the Web browser client."

And Oliver at Page 17, Lines 10-26:

"TVS introduces the notion of a "session" into the World Wide Web. Once a user is authenticated by his "home" Publishing Member, that Publishing Member provides user profile information to its TVS server, which returns an authentication token that is valid for a restricted period of time. Once given this token, the user can access any TVS-enabled HTTP server for the duration of validity without reauthentication. This time period is the "session".

"Publishing Members maintain a "user profile" of each User Member. This profile contains three types of information: "preference" information, "service class" information and, if desired, "pricing" information. Preference information is given by the user member, while service-class information and pricing information are provided by the Publishing Member. These types of information relate to the variety and quality of services offered by the Publishing Member, and each may affect the cost of that service. Some of the profile information can be changed on a session basis, where other types can only be changed by the Publishing Member at fixed points.

Oliver Page 18, Lines 3-8:

"At the start of each session, this profile information is passed to the TVS server when the HTTP server requests an authentication token for the user. The information is loaded by the TVS server into a Dynamic Session Database. When, during the session, any Publishing Member requests that TVS validate this

authentication, TVS returns the profile information to that Publisher as part of the authentication. Thus, even though each user is "owned" by only one Publishing Member (the "home"), all Publishing Members have access to that user's profile information through TVS."

Oliver also describes the sending of that token by a Clickshare Publishing Member site (known as the SP site in Teper) to the Clickshare Token Validation Service (known as the "online brokering service" in Teper). In both Teper and Oliver the back-end service (TVS or "online brokering service") has a database which contains account information of registered users.

Oliver at page 50, lines 2-7:

"The HTTP server contacts the TVS server to verify that the provided token is valid (that is, this is a valid user and a valid session).

"7.7 VERIFICATION AND PROFILE RETURN

"The TVS server receives the request, and verifies it using the internal databases it has constructed from the information provided when Authentication Tokens are issued. As an acknowledgment, TVS returns the user's profile information to the HTTP server."

Oliver at Page 30, Lines 7-21:

"The TVS server maintains a Dynamic Session Database (short-lived) of active sessions, indexed by user identification number, "home" publisher affiliation, and the user's host IP address. Among the data contained in the Dynamic Session Database are:

- Alpha-numeric identifying number of the user*
- User-owning publishing-member number (Clickshare Service Provider)*
- Session number*
- Current number of authentications (cumulative)*
- User service parameters including:*
 - Parental control flag (ON/OFF)*
 - Full ads / links only / no ads*
 - Pricing query threshold*
 - Service-class designator (price markup value)*
 - Session start time*
 - Topical information preferences (if "open")*
 - Age, sex, income, demographic profile (if "open")"*

Oliver page Page 49, Lines 4-8:

"When the HTTP server receives the returned token, it is ready to deliver the requested content (as well as the token) to the requesting client. The content is delivered in the canonical HTTP method (accompanied by MIME Response Headers as appropriate). The Authentication token can be delivered to the user's client program (Mosaic, Netscape, Lynx, an "agent", etc.) in several ways."

Oliver, Page 50, Lines 9-14:

"7.8 CONTENT RETURN

The HTTP server uses the profile information to determine how best to respond to the user's request. In some cases, information in the profile may indicate that the server should not respond -- or warn the user about the cost of nature of the information requested. The profile information returned to the HTTP server can be used by the server itself to fulfill the request (typically the case with standard "static" file service requests), and is also made available as part of the execution environment for Common Gateway Interface (CGI) scripts."

processing the response message at the remote online broker site to determine whether the response message is authentic, the step of processing comprising accessing the account information in the brokering database;

Oliver describes the processing of a response message containing a user token to see if the token is valid (i.e., issued previously by the Token Validation Service), including the step of accessing a "dynamic session database" containing account information of registered users with an active session underway.

Oliver at page 50, lines 5-7::

"7.7 VERIFICATION AND PROFILE RETURN

"The TVS server receives the request, and verifies it using the internal databases it has constructed from the information provided when Authentication Tokens are issued. As an acknowledgment, TVS returns the user's profile information to the HTTP server."

sending a verification message from the remote online broker site to the SP site, the verification message indicating whether the response message is authentic;

Oliver describes TVS sending a verifying message to the Publishing Member web site, indicating whether the response message (in Clickshare, the "token") is authentic - that it represents a key to a set of data within the dynamic session database relating to a particular user's active session

underway.

Oliver at page 50, lines 5-7:

"7.7 VERIFICATION AND PROFILE RETURN

"The TVS server receives the request, and verifies it using the internal databases it has constructed from the information provided when Authentication Tokens are issued. As an acknowledgment, TVS returns the user's profile information to the HTTP server."

retrieving access rights data of the user from the brokering database if the response message is authentic, the access rights data specifies a plurality of content categories to which the user has access, the plurality of content categories corresponding to a plurality of different online services offered by the SP site;

Oliver describes the retrieving by TVS ("online broker") from its dynamic session database of service class data (determining access rights and content categories).

sending the access rights data from the online broker site to the SP site;

Oliver describes the sending of such service-class data from TVS ("online broker site") back to the Clickshare Publishing Member ("SP") site.

providing the online service from the SP site to the user computer over the public network if the verification message indicates that the response message is authentic; and

Oliver describes the step of the Publishing Member ("SP") site sending requested information to the end-user's computer if the message received from TVS ("online broker site") confirms that the token submitted was found to be associated with a set of user data in the TVS dynamic session database.

Oliver at Page 57, Lines 23-25; Page 57, Lines 1-2:

"26. A method as recited in claim 24, which includes an acceptance step by which a client's token is accepted by a method member from whom the client wishes to receive services or goods across a data network, and is instantaneously submitted to the method's common service point, which, if the token's contents match that of a token in the common service point's dynamic session database, returns preference, pricing and service-class information about the requesting client, prior to the providing of the requested services or goods across a data network."

denying access by the user to the online service if the verification message indicates that the response message is not authentic.

Oliver describes the condition of a "bad token" in which the end user's computer is sent a message denying access to requested content. [See Exhibit B, attached hereto]

Oliver at Page 51, Lines 2-14:

"7.10 HANDLING VALIDATION TIME-OUT

When a user's Authentication Token "times-out", information requests made with that token are invalid. If the user does not specifically end his session prior to this time-out, it is likely that the user will be making an information request to a Publishing Member other than his "home" when the time-out happens.

"TVS, in cooperation with the HTTP servers, provides a mechanism to return the user to his "home" Publishing Member, undertake the process of re-authentication, and return to the site of the timed-out request - all transparently to the user. This process is handled using HTTP "Redirect" responses, but the key to success is the association with TVS which is the only party that knows where the user's home can be found.

"A similar process works when completely invalid tokens are presented to TVS for verification. In such cases, TVS instructs the HTTP server to redirect the user to known points (in the current case, to Clickshare Service Corp.'s pages) such that the user can return "home" himself, or can select a "home" if necessary.

2. A method as in claim 1, wherein the step of generating a response message comprises obtaining a password of the user.

Oliver describes a process in which the user enters a user name and password as a response to the request from the Clickshare Publishing Member for authentication.

3. A method as in claim 2, wherein the step of generating the response message further comprises applying a cryptographic algorithm to at least the challenge message such that the resulting response message depends upon both the challenge message and the password.

Oliver does NOT describe any use of cryptographic algorithms in the interactions between the end user's computer and the Clickshare Publishing Member or Clickshare Service provider.

4. A method as in claim 2, wherein the step of obtaining the password of the user comprises retrieving the password from a password cache on the user computer, the password cache temporarily storing the password following manual entry by the user, the method thereby enabling the user to access multiple SP sites without re-entering the password.

Oliver describes the use of the password cache within the web browser software on the user's computer to retrieve the temporarily stored user name/password string provided earlier by the user so as to be able to access multiple web sites without re-entering the password.

Oliver at Page 31, Lines 8-10:

"Users with active sessions will have to re-authenticate with their home publisher, but this is transparent given graceful handling by the TVS client web server and caching of username/password in most browsers."

5. A method as in claim 1, further comprising the steps of:
assigning an anonymous identifier to the user at the online broker site and sending the anonymous identifier to the SP site to enable the SP site to anonymously charge the user for an online service; and
generating a billing event at the SP site and sending the billing event to the online broker site, the billing event specifying at least (1) the anonymous identifier of the user, and (2) a monetary charge to be applied to an account of the user.

Oliver describes the steps of the Token Validation Service (online broker) constructing (assigning) a token (anonymous identifier) and sending the token to the Clickshare Service Provider (service provider) site to enable the Service Provider site to in turn provide the token to web-browser software on the end-user's computer, which browser may in turn provide the token to Clickshare Publishing Member websites when the user seeks service from the publishing member site. The Publishing Member website generates an enhanced log report (billing event) and sends the log report to the Token Validation Service (online broker), the log report specifying at least (a) the token (anonymous identifier) specific to that particular user's and (b) a monetary charge to be applied to the account of the user.

Oliver at Page 16, Lines 14-23:

"Using the TVS model, individual publishers or service providers authenticate their own users, and then ask TVS to store the user's preference, pricing and service-class information in a "publicly accessible" place. In return, TVS provides an authentication token which is returned to the user (specifically, the user's browser). All subsequent access to any TVS-enabled service is governed by this token (non-TVS services are not affected). TVS validates the token on behalf of any individual service, and passes in return the user's profile and class information. When a server has provided service to a validated user, that server returns to TVS a record of the service provided. This record is used by TVS to generate a number of forms of usage information, particularly billing and settlement information. Periodically, this information is returned to all publishers."

Oliver at Page 17, Lines 10-16:

"TVS introduces the notion of a "session" into the World Wide Web. Once a user is authenticated by his "home" Publishing Member, that Publishing Member provides user profile information to its TVS server, which returns an authentication token that is valid for a restricted period of time. Once given this token, the user can access any TVS-enabled HTTP server for the duration of validity without reauthentication. This time period is the "session".

Oliver at Page 34, Lines 3-24 and Page 35, Lines 1-22:

"5.13.1. CLICKSHARE-ENHANCED LOG FORMAT

"The TVS client transmits to the server-side (logging facility) records of each access in an enhanced Common Log Format. Seven pieces of information are provided in the Common Log Format:

- fully qualified domain name (or dotted decimal IP address) of the client*
- rfc931 user*
- auth user*
- date in dd/mm/yyyy:hr:mn:se -OXXX format (where OXXX" is hours from GMT)*
- the request (a quoted string featuring method + URL filepath)*
- the HTTPD status code*
- the number of bytes transmitted to the client*

"In addition, the TVS client transmits the following Clickshare-specific information:

-- content server ID (cs_contentpmid) -- A globally unique ID number identifying the company which served the content to the user. Clickshare Service Corp. maintains a map of ID numbers to company names and contact addresses.

-- page class (cs_pageclass) -- A numeric identifier for the value of the page served. The value is used as a lookup into a table of currency-denominated values which are used to price the page.

-- user ID (cs_userid) -- A user identifier, unique to each Clickshare service or content provider, that identifies the user within that provider's site.

-- home publisher ID (cs_homepmid) -- A globally unique ID number identifying the company which maintains the financial relationship with the user (user ID) for billing purposes.

-- session ID (cs_sessionID) -- An identifier for an activity session by a user. A session is a defined period of time during which an authentication token is valid. The length of a session can be requested by the user, or set by the home provider, upon startup). Sessions may be concatenated in time, but sessions cannot overlap. Session IDs are unique to each publisher for a period of about eight months.

-- customer group (cs_custgroup) -- A numeric identifier for the customer's local group. Two groups are global within Clickshare: Group 1, the default standard group and Group 15, the "testdrive" group. All other values are set locally by the

home publisher for his own reference.

-- service class (cs_serviceclass) -- A coded numeric identified for special service classing. Service classes may be related to markup ratios for retail pricing or may specify the types of services or goods which the user is authorized to acquire or receive.

-- flags (cs_flags) -- A coded numeric identifier which concatenates all the user-preference flag information (on/off flags) for this session. These preference flags relate to user privacy, parental-control (content selection) and other features and part of the "contract" between the user and the user's Clickshare Service Provider.

"Other open data blocks are designed to carry releasable demographics and topical preferences, or other metrics, including a Universal Resource Identifier [see Section 5.20] depending upon the requirements of Clickshare service members."

6. A method as in claim 5, further comprising the steps of:
establishing a connection between the user computer and the online broker site; and providing an online billing statement to the user over the connection, the online billing statement reflecting the monetary charge specified in the billing event.

(NOT ANALAGOUS TO CLICKSHARE ARCHITECTURE; WE HAVE A UNIQUE CLAIM HERE)

Oliver describes establishing a connection between the Token Validation Service (online broker site) and the Clickshare Service Provider site and providing periodic aggregated usage reports to the Clickshare Service Provider of access by the CSP's end-users to online resources at various Clickshare Publishing Member sites. Oliver also describes the transmission via Email of a periodic report of the end-user's usage to the end user's Email account from the Clickshare Service Provider.

7. A method as in claim 5, further comprising the step of sending a billing statement from the online broker site to the user computer over the public network, the billing statement reflecting the monetary charge specified in the billing event.

(NOT ANALOGOUS TO CLICKSHARE; WE HAVE A UNIQUE CLAIM HERE)

Op. Cit., above, Clickshare backend sends aggregated, periodic log reports to end-user's "home base" - the Clickshare Service Provider, which is responsible for sending and/or presenting those reports to the end user. We have thought about a direct query by the end user to the Clickshare backend in real time to support debit transactions but have not implemented.

8. A method as in claim 1, further comprising the steps of:
sending an access rights update request from the SP site to the remote online broker site, the access rights update request specifying an update to be made by the online brokering service to the access rights of the user; and
processing the access rights update request at the online broker site

by updating the access rights data of the user stored within the brokering database.

Clickshare describes the transmission of specific user profile, preference and service-class (access rights) information (updates) from the Clickshare Service Provider website to the Clickshare Token Validation Service backend (remote online broker site) at the time the end-user initiates a Clickshare session. The information (updates) is used to populate a database entry, a token is constructed which is a key to that database entry, and the token is returned to the Clickshare Service provider, which in turn is provided to the end-user's web browser. [See citations to Oliver et al. at Claim No. 5, above]

9. A method as in claim 1, further comprising the steps of: retrieving user-specific preference data of the user from the brokering database and sending the preference data from the online broker site to the SP site, the preference data indicating at least one user-specified preference for the customization of online services; and adjusting the online service provided from the SP site according to the user-specified preference.

Oliver describes the step of retrieving user-specific preference data of the user from the dynamic session database of the Clickshare Token Validation Service (brokering database) and sending the preference data from the TVS (online broker site) to the Clickshare Publishing Member (SP) site, the preference data indicating at least one user-specified preference for the customization of online services; and adjusting the online service provided from the Publishing Member (SP) site according to the user-specified preference, e.g., serving an advertisement for a product of interest to the user based on the user's preferences. [See citations to Oliver et al. at Claim No. 5, above]

Also, Oliver at Page 6, Lines 18-21:

“PERSONALIZATION -- It allows consumers to store their custom information preferences as part of their user profile and then optionally give those preferences to web publishers who wish to personalize their offerings.”

10. A method as in claim 9, wherein the preference data includes a connection speed at which the user computer connects to the public network, and wherein the step of adjusting comprises providing the service to the user computer at a speed which is commensurate with the connection speed.

Oliver makes no specific mention of transferring preference data about connection speed.

11. A method as in claim 9, wherein the preference data includes a display preference for the display of a particular type of media.

Oliver makes no specific mention of transferring preference data about display of a particular type of media.

12. A method as in claim 1, further comprising the steps of: generating a first session key at the user computer; generating a second session key at the online broker site and sending the second session key to the SP site, the second session key corresponding to the first session key; and

using the first and second session keys to encrypt and decrypt message traffic between the user computer and the SP site as the online service is provided to the user computer.

Oliver makes no specific mention of encryption technology at the end-user level.

Oliver at Page 38, Lines 2-10:

"In the current implementation of the TVS service, almost no encryption is used. The only transacted item that is encrypted is the authentication token which travels along with each user request. This token is issued by the Clickshare/TVS authentication server, and only that server needs to "decrypt" it. All other parties (HTTP servers, and other TVS servers) treat the token as "opaque". Since only the originating TVS server will view the contents of the authentication token, a "private key" encryption algorithm can be used. That private key is stored on the authentication server which originates the token, and remains valid only for the duration of that user's session.

"Currently, TVS uses the IDEA encryption algorithm with a 128-bit key."

13. A method as in claim 1, wherein the public network comprises the Internet.

Oliver describes a preferred implementation using the Internet.

14. A method as in claim 1, wherein the steps of passing the request, challenge and response messages over the public network respectively comprise passing the request, challenge and response messages over a private network.

Oliver does not differentiate between an implementation on a public or private network.

Oliver at Page 2, Lines 20-21:

"It is, therefore, an outstanding object of the present invention to provide a system and method for managing transactions on networks."

15. A method providing a fee-based online service from a Service Provider (SP) site to a user over a public network while concealing the payment and personal information of the user from the Service Provider, comprising the steps of:

Oliver describes providing information and services for fees from a Clickshare Service Provider to a user over a public network while concealing the payment and personal information of the user from the Clickshare Publishing Members who provide the services or information.

Oliver at Page 13, Lines 10-12:

"In providing the TVS service, Clickshare Corporation or its licensee maintains only transitory knowledge of any specific user, and even then, only by a user identification number (not by demographic or financial information)."

Oliver at Page 14, Lines 13-26; Page 15, Lines 1-2:

"4.4. NO SPECIFIC PRIVACY MODEL ENFORCED

"Clickshare realizes that being involved in the "authentication" universe means dealing with sensitive personal financial information. There is a lively debate on-going among privacy advocates and content providers (who use the sales of lists of such information to enhance their revenues).

"The TVS model does not enforce a specific privacy model. The service itself operates by identifier numbers, not by names, and Clickshare Service Corp. -- on its own -- will not be able to correlate an ID with a person. However, nothing inherent in the TVS service specifically prevents a Publishing Member from making this correlation on his own through methods unrelated to the Clickshare service. It is possible within the design of TVS to offer a "Swiss-bank" type of "blind usage" for users that wish to pay for same. No such service is currently implemented.

"As designed, TVS will be able to collect and aggregate content usage information and "localize" this information to a specific user-ID and provider-ID. This alone will go a long way towards providing third party verification of use without direct reference to personal information."

providing an online broker site that provides an online brokering service, the online broker site having a brokering database which contains account information on the user and on other users of the online brokering service, the online broker site located remotely from the SP site; establishing a connection between a computer of the user ("user computer") and the SP site over at least the public network; generating an encrypted authentication message at the user computer and sending the authentication message to the online broker site via at least the public network; verifying the authentication message at the online broker site to thereby authenticate the user, the step of verifying comprising accessing the account information of the user stored in brokering database; generating an anonymous ID at the online broker site and sending the anonymous ID to the SP site to allow the SP site to charge the user for the online service;

Oliver describes providing a Token Validation Service (online broker site) having a dynamic session database (brokering database) which contains information on the user and other users of the Clickshare/TVS Service's affiliated Service Providers, the TVS (online broker site) being located

remotely from the Clickshare Publishing Member sites (SP site); establishing a connection between a computer of the user and the Clickshare Publishing Members site (SP site) over any network; generating an encoded or encrypted message at the Clickshare/TVS Service, sending that message to the Clickshare Service Provider, which sends it to the end-user's computer which submits it to the Clickshare Publishing Member website, which submits it to the Clickshare/TVS Service for authentication.

Oliver at Page 18, Lines 3-8:

"At the start of each session, this profile information is passed to the TVS server when the HTTP server requests an authentication token for the user. The information is loaded by the TVS server into a Dynamic Session Database. When, during the session, any Publishing Member requests that TVS validate this authentication, TVS returns the profile information to that Publisher as part of the authentication. Thus, even though each user is "owned" by only one Publishing Member (the "home"), all Publishing Members have access to that user's profile information through TVS."

providing the online service from the SP site to the user computer over the public network;

Oliver describes providing content (online) services from a Clickshare Publishing Member site (SP site) to the user computer over a network.

Oliver at Page 2, Lines 4-8:

"... Specifically, the Internet environment is very decentralized, and no one organization controls the user base or access to resources. While this decentralization has tremendous advantages (chief among them, the freedom to select from a wide number of service and content offerings), this lack of "unity" can confuse and sometimes frustrate both potential information providers and users"

Oliver at Page 4, Lines 22-25:

"TVS is a service for validating and profiling a large base of users distributed across independent content and service providers, simultaneously supporting content usage verification ("audience measurement"), billing at the "micro-transaction" ("per-page") level, and exchange of user attributes."

Oliver at Page 5, Lines 9-13:

"Using TVS, content providers can "share users" through a common validation/profiling technique and exchange value for their content through a common, background, process. By permitting owners of content to collect royalties and receive commissions automatically, TVS creates the economic incentive for content providers to link to each other's content in a manner that leverages the

content base of all providers simultaneously, and is completely transparent to the user."

retrieving user-specific customization data of the user from the brokering database and sending the customization data from the online broker site to the SP site, the customization data indicating a user-specified preference for the customization of the online service; adjusting the online service provided from the SP site according to the user-specified preference; and generating a billing event at the SP site and sending the billing event to the online broker site, the billing event specifying at least (1) the anonymous ID, and (2) a monetary charge to be applied to an account of the user.

Oliver describes retrieving use-specific customization data of the user from the Clickshare/TVS dynamic session database (brokering database) and sending the customization data from there to the Clickshare Publishing Member (SP) site, the customization data indicating a user-specified preference for the customization of the information (online) service; adjusting the service provided from the Clickshare Publishing Member (SP) site according to the user-specified preference; and generating an enhanced log report (billing event) at the Clickshare Publishing Member (SP) site and sending that report/event to the Clickshare/TVS (online broker site), the report/event specifying at least (a) the token (anonymous identifier) specific to that particular user's and (b) a monetary charge to be applied to the account of the user.

Oliver at Page 16, Lines 14-23:

"Using the TVS model, individual publishers or service providers authenticate their own users, and then ask TVS to store the user's preference, pricing and service-class information in a "publicly accessible" place. In return, TVS provides an authentication token which is returned to the user (specifically, the user's browser). All subsequent access to any TVS-enabled service is governed by this token (non-TV services are not affected). TVS validates the token on behalf of any individual service, and passes in return the user's profile and class information. When a server has provided service to a validated user, that server returns to TVS a record of the service provided. This record is used by TVS to generate a number of forms of usage information, particularly billing and settlement information. Periodically, this information is returned to all publishers."

Also, Oliver at Page 6, Lines 18-21:

"PERSONALIZATION -- It allows consumers to store their custom information preferences as part of their user profile and then optionally give those preferences to web publishers who wish to personalize their offerings."

16. A method as in claim 15, wherein the step of generating an encrypted authentication message comprises the steps of prompting the user for a password and using the password to generate the authentication message, the password stored in the brokering database so that the online brokering service can determine whether the

authentication message corresponds to the password.

Oliver describes a method wherein the step of generating an encrypted token (authentication message) comprises the steps of the Clickshare Service Provider prompting the user for a user-name and password, verifying that the user is registered with the provider, then requesting the Clickshare/TVS to accept certain demographic, preference and service-class information of the user into a dynamic session database in exchange for producing the encrypted token which acts as a lookup key for further access to the dynamic-session database record.

17. A method as in claim 15, wherein the step of sending the encrypted authentication message to the online broker site comprises the steps of:
sending the authentication message from the user computer to the SP site over the public network; and
sending the authentication message from the SP site to the online broker site.

Oliver describes the sending of the encrypted token by the web browser software on the end-user's computer to the Clickshare Publishing Member (SP) site, which then takes the token and submits it to the Clickshare/TVS backend (online broker site) for authentication as matching a key to a database record in the dynamic session database.

18. A method as in claim 15, further comprising the step of processing the billing event at the online broker site to thereby apply the charge to the account of the user.

Oliver describes the processing of enhanced log reports (billing events) by the Clickshare/TVS backend (online broker site) for submission to the Clickshare Service Provider sites with whom users are registered; which Clickshare Service Providers then apply the charge(s) to the account of the user.

Oliver at Page 19, Lines 7-25 and Page 20, Lines 1-21:

"5.3.1. Server Side Components

"Clickshare Authentication Service

"This service authenticates users in real time allowing each user access to any Clickshare Service Provider without reauthentication for the duration of one session. This service is provided by a set of server machines distributed around the Internet for better fault tolerance and performance.

"Components

+ Token Validation Service (TVS) server/daemon (tvsd)

"Clickshare Logging Service

This service logs user transactions occurring at all Clickshare Service

Providers sites, in real time. The major component of this service is the Logging Facility - a large database storing all transaction records for production billing. This facility can be operated behind a firewall, due to the design of the Facility interface server.

Components

- + Clickshare Logging Facility (SQL database) (mSQL)
- + facility server interface daemon (logd)

"Clickshare Settlement Service

The service "settles" accounts receivable / accounts payable activity among the Clickshare Service Providers on a periodic basis. It interfaces to the Logging Facility database environment in an "off-line" (non real-time) manner. Activity reports are generated for all parties. An interface to the Automated Clearinghouse (ACH) allows fully automated settlement.

Components

- + settlement engine
- + interface to automated clearinghouse (ACH, Bank of Boston)

"Clickshare Billing Interface

This service provides periodic billing records and account summaries to each of the Clickshare Service Providers. It interfaces to the Logging Facility database environment through a set of billing procedures which themselves are tailored to interface with customer billing systems. Billing records are sent to the Service Providers via electronic mail. As an auxiliary capability, the Clickshare Billing Interface can generate user account update summaries upon request from the Service Providers.

Components

- + billing record generator
- + billing report generator
- + session summary generator / remailer
- + interface to Visa/MC electronic merchant vendor service"

19. A method as in claim 18, further comprising the step of providing an account statement from the online broker site to the user computer over at-least the public network, the account statement reflecting the charge specified in the billing event.

Oliver does not describe a direct-bill relationship between the Clickshare/TVS and the end-user computer.

[See comments to Claim No. 18, above]

20. A method as in claim 15, further comprising the steps of:
retrieving access rights data of the user from the brokering database,
the access rights data specifying the access rights of the user with
respect to the online service and/or the SP site; and
sending the access rights data from the online broker site to the SP
site.

Oliver describes retrieving service-class (access rights) data of the user from the TVS dynamic session database (brokering database), the access rights data specifying the service class (access rights) of the user with respect to one or more Clickshare Publishing Member (SP) sites; and sending the service-class (access rights) data from the TVS database (brokering database) to the Publishing Member (SP) site.

Oliver at Page 16, Lines 14-23:

"Using the TVS model, individual publishers or service providers authenticate their own users, and then ask TVS to store the user's preference, pricing and service-class information in a "publicly accessible" place. In return, TVS provides an authentication token which is returned to the user (specifically, the user's browser). All subsequent access to any TVS-enabled service is governed by this token (non-TVS services are not affected). TVS validates the token on behalf of any individual service, and passes in return the user's profile and class information. When a server has provided service to a validated user, that server returns to TVS a record of the service provided. This record is used by TVS to generate a number of forms of usage information, particularly billing and settlement information. Periodically, this information is returned to all publishers."

*21. A method as in claim 20, further comprising the step of
interpreting the access rights data at the SP site to determine
whether the user is authorized to access a particular content item of
the SP site.*

Oliver at Page 6, Lines 22-25:

"ACCESS CONTROL -- It permits a web site to differentiate requests for information by individual users rather than broad domains -- even if the user has never registered with that particular web site. This "Service Class" technology avoids users having to maintain multiple IDs and passwords."

Oliver at Page 7, Lines 12-14:

"INFORMATION SELLERS/RESOURCE PROVIDERS -- Operators of World Wide Web sites who wish to make money from the sale of information or software, or wish

to control access to resources."

Oliver describes the step of the Clickshare Publishing Member (SP) site interpreting service-class (access rights) data to determine whether the user is authorized to access a particular content directory (item) of the Publishing Member (SP) site.

22. A method as in claim 20, further comprising the step of sending an access rights update request from the SP site to the online broker site, the access rights update request specifying at least (1) the anonymous ID of the user, and (2) an update to be made by the online brokering service to the access rights data of the user.

Oliver does not describe the sending of updating access or service information from the Clickshare Publishing Member (SP) to the Clickshare/TVS (online broker site). Rather, Oliver describes the transmission of user preference, demographic and service-class information to the Clickshare/TVS dynamic session database by the Clickshare Service Provider at the start of a Clickshare session, such data being extracted from the local user-registration database of the Service Provider.

23. A method as in claim 15, wherein the customization data includes a connection speed at which the user computer connects to the public network, and wherein the step of adjusting comprises providing the service to the user computer at a speed which generally corresponds to the connection speed.

Oliver makes no specific mention of transferring preference data about connection speed.

24. A method as in claim 15, wherein the customization data includes a display preference for the display of a particular type of media.

Oliver makes no specific mention of transferring preference data about display of a particular type of media.

25. A method as in claim 15, further comprising the steps of:
generating a first session key at the user computer;
generating a second session key at the online broker site and sending the second session key to the SP site, the second session key corresponding to the first session key; and
using the first and second session keys to encrypt and decrypt message traffic between the user computer and the SP site as the online service is provided to the user computer.

Op. Cit., Claim No. 12

26. A method as in claim 15, wherein the public network comprises the Internet.

Op. Cit., Claim No. 13

27. A method as in claim 15, wherein the online service comprises a software download service.

Oliver describes the application of the Clickshare/TVS service for software downloads.

28. A method as in claim 15, wherein the online service comprises user access to an online version of a printed publication.

Oliver describes the application of the Clickshare/TVS service for access to an online version of a printed publication.

Oliver at Page 7, Lines 10-17:

"3.2 PARTIES INVOLVED IN SERVICE

"The parties involved in the Clickshare/TVS service include:

"INFORMATION SELLERS/RESOURCE PROVIDERS -- Operators of World Wide Web sites who wish to make money from the sale of information or software, or wish to control access to resources. These are called Clickshare Publishing Members or Clickshare Resource Providers. Examples include: newspapers, magazines, specialty publications, new-media entrepreneurs, game vendors, software publishers, health-care providers, network or other service providers."

SECURE ACCESS TO SERVICES OVER AN UNTRUSTED NETWORK

29. A system for allowing users to securely access online service providers over an untrusted distributed network, comprising:
a plurality of Service Provider (SP) sites connected to the distributed network, each SP site running at least one service application to provide an online service to users over the distributed network;
a plurality of user computers connected to the distributed network, each user computer running at least one client application for accessing online services of the SP sites;
an online broker site connected to the plurality of SP sites, the online broker site running at least one brokering application to provide an online brokering service, the online broker site including a user database containing user-specific authentication information of users that have registered to use the online brokering service, the registered users accessing the SP sites from the users computers over the distributed network;
a database which stores user-specific customization data, the customization data specifying preferences of the registered users with respect to the online services of the SP sites, the customization data provided to the SP sites by the online brokering service to enable the SP sites to customize the online services to the preferences of individual registered users; and
an authentication protocol for allowing the online brokering service to authenticate registered users in response to user-specific authentication requests from the SP sites, the authentication requests responsive to requests from the user computers to access the online services of the SP sites, the authentication protocol implemented by software components of the user computers, the SP sites, and the

online broker site.

Oliver describes a system for allowing users to access Clickshare Publishing Members (online service providers) over the Internet (untrusted, distributed network), comprising:

A plurality of Clickshare Publishing Members (SP) and Clickshare Service Provider sites connected to the Internet (distributed network), each such Publishing Member (SP) site providing content (service application) to provide information services (online service) to users over the Internet (distributed network);

A plurality of user computers connected to the Internet (distributed network), each user computer running a web-browser client (client application) for accessing information content (online services) of the Clickshare Publishing Member (SP) sites;

A Clickshare/TVS backend (online broker site) running the TVS server software (brokering application) to provide Token Validation Services (online brokering service), the TVS/brokering site including a dynamic session database (user database) containing user-specific preference, profile and service-class (authentication) information and accessed via an encrypted token-based key, such users having registered with their Clickshare Service Provider, the registered users accessing the Publishing Member/SP sites from the users' computers over the Internet (distributed network).

A dynamic-session database (database) which stores user-specific preference, profile and service-class (customization) data specifying preferences of the registered users with respect to the information (online) services of the Publishing Member (SP) sites, the preference, profile and service-class (customization) data provided to the Publishing Member (SP) sites to enable the Publishing Member (SP) sites to customize the information (online) services to the preferences of individual registered users; and

An authentication protocol for allowing the Clickshare/TVS to validate (authenticate) registered users of the Clickshare Service Providers in response to user-specific validation (authentication) requests from the Clickshare Publishing Member (SP) sites, the validation (authentication) requests responsive to requests from the user computers to access the information (online) services of the Clickshare Publishing Member (SP) sites, the validation protocol implemented by software components of the user computer's web browser, the Clickshare Publishing Member (SP) sites and the Clickshare/TVS (online broker) site.

30. A system as in claim 29, further comprising a billing system for allowing the SP sites to charge the registered users for accesses to the online services by sending billing events to the online brokering service, the billing system including a centralized database for recording billing events to accounts of the registered users.

Oliver teaches a system further comprising a billing system for allowing the Clickshare Publishing Member (SP) sites to charge the registered users of Clickshare Service Providers for access to the information (online) services of the Clickshare Publishing Member site by sending enhanced log records (billing events) to the Clickshare/TVS (online brokering service), the billing system including a centralized logging daemon (database) for recording enhanced log records (billing events) for periodic aggregation, sorting and charging to the accounts of Clickshare Service Providers, who in turn may charge their registered users.

31. A system as in claim 30, wherein the billing system includes a billing viewer application running on the user computers, the billing viewer application allowing a registered user to view a personal billing statement stored in the centralized database, the billing statement including charges from multiple different SP sites of the

plurality of SP sites.

Oliver does not specifically describe any end-user billing applications, However:

Oliver at Page 19, Lines 16-25; Page 20, Lines 1-21:

"Clickshare Logging Service

This service logs user transactions occurring at all Clickshare Service Providers sites, in real time. The major component of this service is the Logging Facility - a large database storing all transaction records for production billing. This facility can be operated behind a firewall, due to the design of the Facility interface server.

Components

- + Clickshare Logging Facility (SQL database) (mSQL)
- + facility server interface daemon (logd)

"Clickshare Settlement Service

"The service "settles" accounts receivable / accounts payable activity among the Clickshare Service Providers on a periodic basis. It interfaces to the Logging Facility database environment in an "off-line" (non real-time) manner. Activity reports are generated for all parties. An interface to the Automated Clearinghouse (ACH) allows fully automated settlement.

Components

- + settlement engine
- + interface to automated clearinghouse (ACH, Bank of Boston)

"Clickshare Billing Interface

"This service provides periodic billing records and account summaries to each of the Clickshare Service Providers. It interfaces to the Logging Facility database environment through a set of billing procedures which themselves are tailored to interface with customer billing systems. Billing records are sent to the Service Providers via electronic mail. As an auxiliary capability, the Clickshare Billing Interface can generate user account update summaries upon request from the Service Providers.

Components

- + billing record generator
- + billing report generator
- + session summary generator / remailer

+ interface to Visa/MC electronic merchant vendor service"

Oliver at Page 36, Lines 12-17:

"This Settlement Service stores records of user access to resources by Service Provider and by user within Service Provider and prepares the records for batch deliveries to the individual user's Service Provider. The Settlement Service also outputs charge records aggregated by Service Provider in a format which can be accepted by gateways to the U.S. banking industry's Automated Clearing House (ACH) service for electronic debiting and crediting of Service Provider and Publishing Member banking accounts."

32. A system as in claim 29, further comprising an access rights database at the online broker site, the access rights database storing access rights data for a plurality of the registered users, the access rights data specifying access rights of the plurality of registered users with respect to the SP sites, the access rights data provided to the SP sites by the online brokering service.

Oliver describes a dynamic session database at the Clickshare/TVS backend (online broker site) which contains, among other things, user service-class data (access rights) provided by the user's Clickshare Service Provider, for a plurality of registered users, with respect to Clickshare Publishing Member (SP) sites, the service-class (access-rights) data provided to the Clickshare Publishing Member (SP) sites by the Clickshare/TVS backend (online brokering service).

Oliver at Page 21, Lines 16-23:

"This service allows Service Providers to register users for the purposes of access control, service customization and billing. All user demographic and financial information (in addition to preference and service classing information) is stored in these databases at each Service Provider site. Users are authenticated locally from information stored in these databases, after which a subset of the stored information is provided to the Clickshare Authentication Service so that it can help all Service Providers recognize valid Clickshare users."

33. A system as in claim 29, wherein the authentication protocol implements a challenge-response protocol.

Oliver does not specifically speak of a challenge-response protocol in the sense implied by Teper, but the interactions between Clickshare user computers and Publishing Member sites, between user computers and Service Provider sites, and between Publishing Member sites and Clickshare/TVS are typically structured as a transmission followed by a response.

34. A system as in claim 29, wherein the distributed network comprises the Internet.

Oliver describes the distributed network as "a public network" or as "the Internet."

PROVIDING FEE-BASED ONLINE SERVICE OVER DISTRIBUTED NETWORK
WHILE CONCEALING PAYMENT/PERSONAL INFORMATION OF USERS

35. A method providing a fee-based online service from a Service Provider (SP) site to a user over a distributed network while concealing the payment and personal information of the user from the Service Provider, comprising the steps of:

- providing an online broker site that provides an online brokering service, the online broker site having a brokering database which contains account information on the user and on other users of the online brokering service, the online broker site located remotely from the SP site;
- sending an access request from a computer of the user ("user computer") over the distributed network to the SP site;
- sending an authentication request from the SP site to the online broker site in response to the access request;
- prompting the user for a user identifier at the user computer and sending the user identifier to the online broker site;
- authenticating the user at the online broker in response to the authentication request, the step of authenticating comprising using the user identifier sent from the user computer to access the account information stored within the brokering database;
- sending a verification message from the online broker site to the SP site in response to the authentication request, the verification message indicating whether the step of authenticating was successful;
- retrieving access rights data of the user from the brokering database if the step of authenticating is successful, the access rights data specifying a plurality of access rights of the user with respect to the online service and/or the SP site;
- sending the plurality of access rights data from the online broker site to the SP site to anonymously inform the SP site of the access rights of the user;
- providing the fee-based online service from the SP site to the user computer over the distributed network only if the verification message indicates that the step of authenticating was successful;
- generation a billing event at the SP site and sending the billing event to the online broker site, the billing event anonymously identifying the user to the online brokering service, the billing event including a charge for the providing of the online service to the user computer; and
- updating an account of the user at the online broker site to reflect the charge included within the billing event.

Oliver describes a method providing for payment for information services or objects (fee-based online service) from a Clickshare Publishing Member (SP) website to a user over the Internet (distributed network) while concealing the payment and personal information of the user from the Publishing Member (SP), comprising the steps of:

Providing a Clickshare/TVS backend (online broker site) which provides a token-validation service (online brokering service) the TVS (online broker site) having a dynamic-session database (brokering database) which contains preference, profile and service-class (account) information on the user and the other users of the Clickshare TVS Services' Service Providers, the TVS backend

(online broker site) located remotely from the Publishing Member (SP) site;
Sending an access request from a computer of the user over the public (distributed) network to the Clickshare Publishing Member (SP) site;
Sending an authentication request from the Clickshare Publishing Member (SP) site to the TVS backend (online broker site) in response to the access request;
If the user is not validated by the TVS backend in response to the access request sent by the Publishing Member (SP) site, prompting the user for a user name/password or other user identifier and using the identifier to redirect the user to begin a session via the Clickshare Service Provider where the user is registered, then taking the unique token generated by the registration process and submitting it to the Clickshare/TVS backend for validation;
Then validating (authenticating) the user at the Clickshare/TVS backend (online broker) in response to the validation request, the step of validating comprising using the token key generated originally by the Clickshare/TVS at the user's session start and submitting it from the Clickshare Publishing Member back to the Clickshare/TVS for validation in order to access the user preference, profile and service-class (account) information stored in the Clickshare/TVS dynamic session database (brokering database);
Then sending a validation message from the Clickshare/TVS (online broker site) to the Clickshare Publishing Member (SP) site in response to the validation (authentication) request, the validation message indicating whether the step of validation (authentication) was successful;
And simultaneously retrieving and
sending along with the validation message, if successful, at least the user service-class (access-rights) data specifying a plurality of access rights of the user with respect to the information (online) service and/or the Publishing Member (SP) site;
Then providing the fee-based (information) service or object from the Publishing Member site to the user computer over the public (distributed) network or Internet, only if the authentication (verification message) was successful;
Then generating an enhanced log report (billing event) at the Publishing Member (SP) site and sending the log report/billing event to the Clickshare/TVS (online broker site), the log report uniquely (anonymously) identifying (by means of a unique alphanumeric string assigned by the user's Clickshare Service Provider), to the Clickshare/TVS (online broker), the log report (billing event) including a charge for providing of the information (online) service or object to the user computer and
Adding to a database of aggregated log reports (updating an account of the user) at the Clickshare/TVS backend (online broker site) the log report containing the charge for the object (service).

36. A method as in claim 35, further comprising the step of providing an account statement from the online broker site to the user computer over at-least the distributed network, the account statement reflecting the charge included in the billing event.

Oliver does not describe a method for providing an account statement from the Clickshare/TVS (online broker site) to the user computer. Oliver teaches a system further comprising a billing system for allowing the Clickshare Publishing Member (SP) sites to charge the registered users of Clickshare Service Providers for access to the information (online) services of the Clickshare Publishing Member site by sending enhanced log records (billing events) to the Clickshare/TVS (online brokering service), the billing system including a centralized logging daemon (database) for recording enhanced log records (billing events) for periodic aggregation, sorting and charging to the accounts of Clickshare Service Providers, who in turn may charge their registered users.

Oliver at Page 47, Lines 12-20:

"6.1.13. Depending upon the version of TVS, CALSa also copies a log report to a real-time metering and billing utility which will permit: (a) The end-using CMA to request and review records of current session access by clicking to an address on a web server at CSPa. The request generates a call from CSPa to CALSa for current-session access logs for end-user CMA. The logs are then parsed against credit/debit account status, pricing and service-class rules maintained by CSPa for its end-users, and fed into a dynamically-generated page shown to the user; or, (b) The assembly and transmission by CSPa via Email to the end user once in each 24-hour cycle a compilation of all TVS-enabled resource purchases or accesses during the previous period from data provided on a batch basis from CALSa. This permits the end-user to verify and/or dispute charges shortly after they are incurred."

A DISTRIBUTED-USER MANAGEMENT SERVICE FOR ALLOWING ANONYMOUS PURCHASE OF INFORMATION SERVICES OR OBJECTS FROM MULTIPLE WEBSITE PROVIDERS

37. An online brokering service for allowing users of a public network to anonymously purchase online services from Service Provider (SP) sites on the public network, the online brokering service provided from an online broker site that is located remotely from the SP sites, the online brokering service comprising:

a database which contains account information of users that have registered with online brokering service, the account information including at least a unique identifier of each registered user;
a billing system for recording monetary charges to accounts of registered users, the monetary charges corresponding to online services purchased from the SP sites over the public network; and
a software package running at the online broker site, the software package performing at least the following functions:

(a) authenticating registered users in response to authentication requests received from the SP sites, the authentication requests generated in response to attempts by registered users to access online services of the SP sites, said authenticating comprising accessing the database to verify user account information;

(b) receiving user-specific billing events from the SP sites and passing the billing events to the billing system to update the accounts of registered users, each billing event specifying at least (1) an anonymous ID of a registered user, and (2) a charge to be applied to the account of the registered user; and

(c) retrieving user-specific access rights data from the database in response to requests from the SP sites and transmitting the access rights data to the SP sites, the access rights data specifying a plurality of content categories or services to which a registered user has access and enabling the SP sites to provide customized access rights to the registered users.

Oliver describes Clickshare/TVS Service, which is a distributed-user management (online brokering) service for allowing users of a public network to anonymously purchase information (online) services or objects from Clickshare Publishing Member (SP) sites on the public network, the TVS Service (online brokering service) providing for a TVS backend (online broker site) that is located remotely from the

Clickshare Publishing Member (SP) sites the TVS Service comprising:

- A dynamic-session database (database) which contains preference, profile and service-class (account) information of users that have registered with Service Providers of the Clickshare/TVS Service, said information including at least a unique identifier of each registered user;*
- A billing system for recording enhanced log records including monetary charges at the Clickshare/TVS backend for ultimate application by Clickshare Service Providers to the accounts of their registered users, the monetary charges corresponding to information (online) services or objects purchased from the Publishing Member (SP) sites over the public network; and*
- A software package running on the Clickshare/TVS backend, the software package performing at least the following functions:*
- (a) Validating (authenticating) registered users in response to validation requests from the Publishing Member (SP) sites, the validation (authentication) requests generated in response to attempts by registered user to access information (online) services or objects of the Publishing Member (SP) sites, said validation comprising accessing the dynamic-session database of the Clickshare/TVS backend to verify that it contains user preference, profile and/or service-class (account) information;*
 - (b) Receiving user-specific enhanced log reports (billing event) from the Publishing Member (SP) sites and passing the enhanced log reports to the Clickshare/TVS backend for aggregation and sorting in a logging database (billing system), ultimately to be provided to Clickshare Service Providers for updating the accounts of their users, each enhanced log report (billing event) specifying at least (1) an anonymous ID of a registered user, and (2) a monetary value to be used to calculate a charge, if any, to be applied to the account of the registered user; and*
 - (c) Retrieving user-specific service-class (access rights) data from the dynamic session database in response to requests from the Publishing Member (SP) sites and transmitting the service-class (access-rights) data which may reference a plurality of content directories (categories) or services to which a registered user has access, and enabling the Publishing Member (SP) sites to provide customized access rights to the registered users.*

38. An online brokering service as in claim 37, wherein the software package further performs the function of: retrieving user-specific customization data from the database in response to requests from the SP sites and transmitting the customization data to the SP sites, the customization data indicating user specified preferences for enabling the SP sites to provide user customized online services.

Oliver describes an Internet distributed-user management (online brokering) service wherein the software package further performs the function of retrieving user-specific preference, profile or service-class (customization) data from the dynamic-session database in response to requests from Clickshare Publishing Member (SP) sites and transmitting such data to the Publishing Member (SP) sites, said data being interpretable as preferences for enabling the Publishing Member (SP) sites to provide user-customized services.

39. An online brokering service as in claim 37, wherein the billing system comprises a software module for allowing the registered user to remotely access an online billing statement, the online billing statement reflecting billing events received by the online broker site from multiple different SP sites.

Oliver describes an Internet distributed-user management (online brokering) service wherein the billing system comprises a software module for allowing the registered user to remotely access an online billing statement, the online billing statement reflecting billing events received by the Clickshare/TVS Service from multiple different SP sites.

Oliver at Page 47, Lines 12-20:

"6.1.13. Depending upon the version of TVS, CALSa also copies a log report to a real-time metering and billing utility which will permit: (a) The end-using CMA to request and review records of current session access by clicking to an address on a web server at CSPa. The request generates a call from CSPa to CALSa for current-session access logs for end-user CMA. The logs are then parsed against credit/debit account status, pricing and service-class rules maintained by CSPa for its end-users, and fed into a dynamically-generated page shown to the user; or, (b) The assembly and transmission by CSPa via Email to the end user once in each 24-hour cycle a compilation of all TVS-enabled resource purchases or accesses during the previous period from data provided on a batch basis from CALSa. This permits the end-user to verify and/or dispute charges shortly after they are incurred."

40. An online brokering service as in claim 37, wherein the public network comprises the Internet.

Oliver describes the distributed network as "a public network" or as "the Internet."

41. A virtual online services network for allowing users to directly access service provider (SP) sites over a public network, comprising: an online brokering service running on at least one site of a computer network, the online brokering service storing account and billing information for a plurality of users of the public network, each of the users having a respective account with the online brokering service, the online brokering service providing online access by the users to account-specific billing information; a plurality of fee-based online services running on a plurality of independent service provider (SP) sites on the public network, the SP sites directly accessible to the users over the public network, each SP site being registered with the online brokering service and being configured to use the online brokering service to authenticate the users when the users connect to the SP sites over the public network, the fee-based services configured to generate account-specific billing events in response to uses of the online services by the users and to forward the billing events to the online brokering service so that the users are billed for the online services from a centralized billing location; and a log-on protocol which allows the users to access the plurality of online services using their respective accounts with the online brokering service, the log-on protocol configured to (1) prompt a user for an account identifier, (2) cache the account identifier during the course of a user log-on session, and (3) use the cached account identifier to access multiple different SP sites, the log-on protocol

thereby allowing the user to seamlessly access the plurality of fee-based online services following a single log-on event; wherein the online brokering service stores user-specific access rights data, and provides the access rights data specifying access rights for a plurality of online services for a specific user to the SP sites in response to requests from the SP sites, and wherein the fee-based online services are configured to use the access rights data to automatically provide user-customized services to the users.

Oliver describes a distributed user-management service (virtual online services network) for allowing users to directly access Publishing Member (SP) sites over a public network, comprising:

An Clickshare/TVS service running on at least one site of a public (computer) network, the TVS service storing preference, profile and service-class (account and billing) information for a plurality of users of the public network, each of the users have a respective account with the Service Providers affiliated with the Clickshare/TVS (online brokering) service, the Clickshare/TVS Service; and,

A plurality of fee-based information (online) services running on a plurality of independent Publishing Member (SP) sites on the public network, the SP sites directly accessible to the users over the public network, each SP site being registered with the Clickshare/TVS (online brokering) service and being configured to use the Clickshare/TVS to validate (authenticate) the users when the users connect to the Publishing Member (SP) sites over the public network, the fee-based services being configured to generate account-specific enhanced log records (billing events) in response to uses of the information (online) services by the users and to forward the log records (events) to the Clickshare/TVS (online brokering) service so that the users of Clickshare Service Providers may be billed for the information (online) services by their Service Providers; and

A log-on protocol which allows the users to access the plurality of information (online) services using their respective accounts with their Clickshare Service Provider (online service), the long-on protocol being configured to (1) have their Clickshare Service Provider prompt at log-in for a unique account identifier, typically a user name and password, (2) cache the user name/password during the course of a user log-on session, and (3) use the cached account identifier to access multiple different Publishing Member (SP) sites, the log-on protocol thereby allowing the user to seamlessly access the plurality of fee-based information (online) services following a single log-on event;

Wherein the Clickshare TVS backend stores user-specific service-class (access rights) data, and provides the service-class (access rights) data specifying access rights for a plurality of online services for a specific user to the Clickshare Publishing Member (SP) sites in response to requests from the Publishing Member (SP) sites, and wherein the fee-based information (online) services may be configured to use the service-class (access rights) data to automatically provide user-customized services to the users.

42. A virtual online services network as in claim 41, wherein the log-on protocol is implemented by respective software components stored on (1) the SP sites, (2) the at least one site of the online brokering service, and (3) computers of the users.

Oliver describes a distributed-user management service (network) wherein the log-on protocol is implemented by respective software components stored on (1) the Publishing Member (SP) sites, (2) at least one site of the Token Validation Service backend (online brokering service), (3) the computers of the users and (4) at the Clickshare Service Provider site where the user is registered and which holds the user's account and billing information.

Oliver at Page 12, Lines 20-25; Page 13, Lines 1-2:

"Clickshare believes that centralization of the user base for the purpose of unified registration, profiling, or measurement is a potentially non-scalable, performance-limiting approach to user management. In the TVS system, the user base is managed at the "local" (publisher/service provider) level. This has technical, sociological and financial advantages. One specific advantage is that the individual publisher/service provider is in control of the customer billing relationship. The system thus presupposes multiple billing agents and requires no centralized database of user-specific demographic data."

Oliver at Page 48, Lines 1-7:

"7.1. CONTENT REQUEST + USER AUTHENTICATION

"To begin, the user points his WWW browser to the home page set up for him at his "home" Publishing Member (step 1). This page has been designated as "authentication required" by the Publishing Member, so the user's browser receives back from the Publishing Member's HTTP server an appropriate status message. The browser prompts the user for his user-name and password, which it then returns to the HTTP server as Request Header information."

Oliver at Page 48, Lines 13-25; Page 49, Lines 1-7:

"7.2 PROFILE "REGISTRATION" AND TOKEN REQUEST

"Once the HTTP server has obtained the user's Authentication information and has validated it locally, the HTTP server contacts TVS with a request for a new Authentication Token. In making this request, the HTTP server sends the user's profile to TVS with a request for a new Authentication Token. This profile information (along with other per-user information) is stored in each publisher's registration database."

"7.3 TOKEN GENERATION AND RETURN

"TVS uses information from the user's profile to build the Authentication token. For example, the user's service class information is used to determine what the token's validity period will be. The Authentication Token has an encrypted "payload" and is "uencoded" and "sanitized" to accommodate the Web URL naming syntax where required. The token is "opaque" to both the HTTP server and to the Web browser client."

"TVS uses private-key encryption technology which is well-known to the Internet community and unencumbered by patent or export restrictions to the best of our knowledge."

"7.4 CONTENT AND AUTHENTICATION RETURN

"When the HTTP server receives the returned token, it is ready to deliver the requested content (as well as the token) to the requesting client. The content is delivered in the canonical HTTP method (accompanied by MIME Response Headers as appropriate). The Authentication token can be delivered to the user's client program (Mosaic, Netscape, Lynx, an "agent", etc.) in several ways."

Oliver at Page 50, Lines 1-21:

"7.6 USER VERIFICATION

"The HTTP server contacts the TVS server to verify that the provided token is valid (that is, this is a valid user and a valid session)."

"7.7 VERIFICATION AND PROFILE RETURN

"The TVS server receives the request, and verifies it using the internal databases it has constructed from the information provided when Authentication Tokens are issued. As an acknowledgment, TVS returns the user's profile information to the HTTP server."

"7.8 CONTENT RETURN

"The HTTP server uses the profile information to determine how best to respond to the user's request. In some cases, information in the profile may indicate that the server should not respond -- or warn the user about the cost of nature of the information requested. The profile information returned to the HTTP server can be used by the server itself to fulfill the request (typically the case with standard "static" file service requests), and is also made available as part of the execution environment for Common Gateway Interface (CGI) scripts."

"7.9 CONTENT ACCESS LOGGING

"After the HTTP server has returned the requested content to the user, this access is logged to the TVS service. A canonical log format is currently used, with information added in keyword=value form at the end of the record."

"Steps 7.5 though 7.9 are repeated for every content/service request within a session when the user requests content from another TVS-enabled publisher. Requests sent to other (non-affiliated) HTTP servers are not affected."

43. A virtual online services network as in claim 41, wherein the log-on protocol includes a challenge-response authentication protocol for allowing the SP sites to authenticate the users.

Op. Cit., Claim No. 33: Oliver does not specifically speak of a challenge-response protocol in the

sense implied by Teper, but the interactions between Clickshare user computers and Publishing Member sites, between user computers and Service Provider sites, and between Publishing Member sites and Clickshare/TVS are typically structured as a transmission followed by a response.

Oliver at Page 48, Lines 1-8:

"7.1. CONTENT REQUEST + USER AUTHENTICATION

"To begin, the user points his WWW browser to the home page set up for him at his "home" Publishing Member (step 1). This page has been designated as "authentication required" by the Publishing Member, so the user's browser receives back from the Publishing Member's HTTP server an appropriate status message. The browser prompts the user for his user-name and password, which it then returns to the HTTP server as Request Header information.

"TVS does not affect the authentication model used by the HTTP server."

44. A virtual online services network as in claim 41, wherein the public network comprises the Internet.

Oliver describes the distributed network as "a public network" or as "the Internet."

45. An apparatus comprising:

A broker server operatively connected to a computer network, the broker server having a processor and a computer readable memory, the memory storing broker server implementation software, including customer access software, site linking software to link customers to selected sites on the computer network and at least one data structure;

the at least one data structure including a list of registered customers along with corresponding ID and payment information, and including a list of online sites with their corresponding linking information, the list of online sites being a subset of the sites available to users of the computer network, the at least one data structure further including access rights to a plurality of online services provided by at least one online site within the list of online sites;

whereby the broker server facilitates seamless connection between a selected customer from its list of customers and a selected online site from the listed online sites to create a virtual online service, including providing the selected customer's access rights to the plurality of online services provided by the selected online site.

Oliver describes a Clickshare/TVS (broker) server connected to a computer network, but does not describe the details of the apparatus;

Oliver describes a dynamic session database structure (data structure) including a list of unique identifying alphanumeric strings of currently authenticated registered customers of Service Provider affiliates, along with certain preference or profile attributes unique to each such

customer, and including a list of information (online) sites, with their corresponding linking information, the list of such information (online) sites being a subset of the sites available to users of the computer network, and the database (data) structure including service-class attributes (access rights) to a plurality of information (online) services provided by at least one information-providing (online) site within the list of such information sites;

Whereby the Clickshare/TVS (broker) server facilitates seamless connection between a selected customer from its dynamic session database (list) of customers and a selected information-vending (online) site from the listed information (online) sites to create a distributed-user management (virtual online) service, including providing the selected customer's service-class preferences (access rights) to the plurality of information (online) services provided by the selected information-vending (online) site.

46. An apparatus as in claim 45, wherein the computer network is a public network which comprises the Internet, and wherein the online sites are World Wide Web sites of the Internet.

Oliver describes as a reference or preferred implementation a public network comprising the Internet, wherein the information-vending (online) sites are World Wide Web sites of the Internet.

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